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QUARTERLY  
REPORT  
ON INFLATION

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2000

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of the National Bank of Hungary

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*The goal of this publication is to describe and interpret the developments of the preceding quarter.<sup>1</sup>*



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<sup>1</sup> The previous issues of the “Quarterly Report on Inflation” are available on the home page of the National Bank of Hungary.



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# Summary

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The National Bank of Hungary's policy target is to achieve price stability through a sustainable decline in inflation. Predictability and moderate interest rates, concomitant with a low inflation environment, both factors which facilitate long-term, rapid economic growth. Achievement of the inflation objective is assisted by an exchange rate regime based on a pre-announced crawling peg. This system promotes a nominal path which poses no risk to external balance, while ensuring convergence of the domestic inflation rate towards the level of Hungary's main trading partners.

Following its slow decline over the first half of the year, the consumer price index rose to 9.6% in July. Although this increase in the CPI was primarily the result of a one-off shock, namely a jump in the price of unprocessed foodstuffs, together with the rise in the world price for oil and, indirectly, the weak euro, the trend of disinflation was also interrupted. The National Bank measures the trend of inflation in terms of a core inflation index, excluding the effect of seasonal foodstuffs, petrol, certain energy and regulated prices, in an attempt to track changes in those factors that are thought to influence the development of inflation over the longer term. Even this core index showed a rise in July as the rapid price increase also affected pork, one of the components of the core inflation index. This would only imply the persistence of negative inflationary tendencies if the price of pork were expected to continue rising at the fast pace seen recently, or if meat price increases were expected to be passed round the economy triggering cost-push inflation. As, however, the prospective changes in unprocessed food prices cannot be determined for certain, currently available data provide no reliable clue to whether disinflation will resume or be reversed.

There are several factors to blame for the slowdown in disinflation. In addition to foodstuff prices noted above, other factors falling outside the scope of monetary policy have also exerted upward pressure on the rate of price increases. Rising oil prices, together with the strengthening of the US dollar, led to a nearly 14% rise in the rate of imported inflation. The previous long-term decline in the inflation differential relative to the euro area stopped and remained flat at around 7.1 percentage points. Thus, the response of the Hungarian economy to the exogenous shocks was somewhat less favourable than in the case of its main trading partners. In addition, the danger of temporary inflationary pressures leading to inertia with a long-term impact is much greater in Hungary than in its trading partners, with a more favourable inflation history. The fact that inertial effects are gaining momentum is clearly seen in the faster growth of private sector wages. Therefore, the resumption of inflation convergence will continue to heavily rely on influencing inflation expectations.

Industrial goods prices, directly disciplined by the exchange rate, have followed the decline in the rate of devaluation. Unlike in 1999, regulated prices increased at a moderate rate, contributing to disinflation. By contrast, market services disinflation has been interrupted, widening the gap between the rates of industrial goods and market services price inflation. The acceleration of prices is partly associated with rapidly growing input costs being passed on to service prices at a faster pace than to industrial goods prices, owing to the presumably lower productivity growth in

services. Furthermore, the continuous expansion of consumer demand is also putting upward pressure on their price level. The average 5.5% difference between the growth rates of tradables and non-tradables prices is consistent with the cyclical position of the economy: thus, it poses no threat to the sustainability of the selected exchange rate path, as it is accompanied by a steady improvement in competitiveness rather than deterioration.

In 2000 Q2, gross domestic product growth lost some momentum, dropping to 5.9% according to preliminary data. This growth was primarily due to a further pick-up in foreign demand (exports increasing by 21% of GDP), whereas the rise in domestic absorption (3.8%) made a smaller contribution to GDP growth than in the previous quarter. Looking at the component parts of domestic absorption, household consumption expanded at a slower pace than last year (3.7%), while investment spending growth remained subdued (5.7%), despite the pick-up in sales possibilities. The moderate rise of domestic absorption entailed a more moderate import requirement (up by 16% in real terms).

The greatest influence on the path of the economy was exerted by the improvement in the cyclical position of Hungary's trading partners, as economic activity in the European Union, CIS and CEFTA countries gathers pace. In addition to the feed-through of these favourable effects, Hungarian balance of trade figures also benefited from the capacity-boosting impact of new investment projects. The volume of exports according to customs statistics continued to expand at a rate of over 25%, while import demand slowed (to 15%). As a result of the 2.8% deterioration in the terms of trade, caused by the rise in the world prices for energy and commodities, there was no improvement in the level of net exports calculated in euro terms. Deterioration in the terms of trade by itself reduced second-quarter nominal GDP by 1.5%.

Although the 3.7% growth in the household consumption component of domestic demand again fell short of the level seen in 1999, it still remained higher than the rate of income growth. The decrease in consumption growth is, in all likelihood, attributable to the slower rise in social cash benefits, with net earnings up by over 4%. At the same time, consumer spending financed by borrowing gained further momentum, also reflected in the continued decline of the propensity to save. The expansion of borrowing went hand in hand with a steady downward trend in households' gross savings. The ratio of financial saving and investment within gross saving remained similar to that a year earlier, with a continued high level of investment, alongside the rate of seasonally adjusted financial savings not even reaching **2.5%** of disposable income, in contrast with 4% in the previous quarter.

In 2000 Q2, investment demand remained subdued, increasing by merely **5.5%** on a year earlier. Only the real estate sector, also comprising investment in residential construction, showed robust growth (18.3%). Investment growth in manufacturing remained moderate, although up on the previous quarter (5.9%). Due to the buoyant activity on foreign markets, a rise in the stock of orders and a pick-up in industrial production, stronger investment activity is projected for the remainder of the year. This expectation is reinforced by the fact that manufacturing capacity utilisation once again reached the level seen in early 1998 and that, in contrast with the previous quarter, there was also a rise in the number of companies reporting a shortage of capacities.

According to fiscal plans, the general government will restrict aggregate demand growth by 0.1% of GDP for the year as a whole. The primary balance in SNA approach improved at a faster rate over the first two quarters (by 2.5% of GDP), but a considerable portion of the demand restricting effect is not sustainable, as it is derived from the changing seasonal pattern of expenditures. The fiscal position looks more favourable than originally planned even with temporary factors removed, contracting demand by an estimated 0.6% of GDP for the year as a whole. The better-than-expected position is the effect of the automatic stabiliser, with stronger-than-planned growth and higher inflation putting upward pressure on fiscal receipts in contrast with expendi-



tures set in nominal terms. Unforeseen fiscal costs incurred through natural disasters were financed through the reallocation of expenditures.

As reflected in the low level of investment activity, faster economic growth has not yet run up against capacity restraints. Nevertheless, the utilisation of the potential labour force is at an increasingly high rate, with **the rate of unemployment below 6.5%**. The Bank's inference from recent labour market data is that the period of 'restoration' following the large-scale negative labour market shock in the early 1990s is over, and economic recovery has, in all likelihood, absorbed those groups of unemployed and inactive people who possessed qualities that helped them find jobs more easily. Consequently, employment growth, alongside falling unemployment and inactivity rates, and the resulting rise in the participation rate, were continuous, but less vigorous than the tendencies observed in 1998–99. It was only the 55–59 age group of the population that saw a considerable rise in employment, and in terms of regional breakdown, dynamic expansion in the western areas of Hungary shifted to northern Hungary, which has been struggling with chronic unemployment.

In 2000 Q2, there was an increase in the rate of **wage inflation** as calculated by the National Bank. The **13.3%** average for the whole economy consisted of an exceptionally high, **15.1%**, rate in the private sector and a more moderate **9.2%** in the public sector. The nearly universal rise in wages across the various segments of the private sector has several possible explanations. The higher-than-expected inflation path is likely to have triggered a retroactive correction, which was covered by strong productivity growth. Thus, it seems expedient to study the combined rates of wage inflation over the first two quarters as a means of obtaining more reliable information. Data for the first six months also indicate that there was hardly any slowdown in nominal wage growth relative to the previous year, a sign indicating a certain degree of *nominal inertia*. Labour market tightness is also pushing up wages, with special regard to *machinery* and *basic metal manufacturing*, where wage inflation was in excess of 16%, as well as transport, storage, postal services and communication, with over 20% white-collar wage inflation. It should be underlined, nevertheless, that the Bank perceives the reason for faster wage increases in the private sector as being related primarily to inflation expectations, with labour market bottlenecks emerging only locally and affecting specific jobs, pushing up wages in specific sectors. In these areas, labour market tightness is also indicated by the increase in the number of hours worked.

The second quarter saw a slight rise in the external financing need of the economy. Balance of payments statistics show a more favourable picture, with no deterioration in the deficit on current account as a proportion of GDP, compared with the 3.5% rate in the previous quarter. The increasing need for funds can only partly be attributed to the increase in the financing requirement, a natural accompaniment of the favourable cyclical position, as the vigorous expansion of exports was not linked with stronger growth in domestic absorption. The factors to blame for the higher net position include deterioration in the terms of trade as well as one-off effects. After a first quarter with no net transfer payments, the second quarter saw a rise in foreign transfers, which, in turn, raised the net financing requirement by 1% of GDP. If the higher value of the second quarter is regarded as being merely a one-off correction for the first quarter, then the financing requirement for the year as a whole is expected to be 0.6% lower than currently projected.

The composition of the net financing requirement differs considerably from that in 1999. Rising borrowing requirement in the private sector was offset by the decrease in the public sector financing need. Just as in the previous quarters, households' saving position continued to weaken, amounting to merely 1.7% of GDP in 2000 Q2. This rapid deterioration was brought about both by a further decline in the saving rate (to 2.5% of disposable income) and the nearly 2-percentage-point fall in households' GDP-proportional income. This latter factor is expected to be corrected in the final quarter when pensions are retroactively raised. On the other hand, as the decline in savings is attributable to structural effects, the rate is likely to worsen rather than im-

prove in the future. After filtering out the one-off effects influencing the corporate sector's financing need (see Chapter V/1), it is found that the rising profitability of the sector has so far provided adequate coverage for stronger investment spending, preventing fast growth from putting upward pressure on the external financing need. However, the prospective pick-up in investment activity is likely to boost companies' financing requirement. The deterioration in households' net saving position has led to no problems so far in the year, as the unfavourable tendency was offset by the net fiscal saving position in the first half of the year. Nevertheless, it would be some cause for concern if, during the remainder of the year, the budget's saving position began to deteriorate to an extent that would no longer be able to cover the expected worsening in the household position. As in 2001, deterioration in both the household and business sector saving position is likely to continue, and, as current budgetary estimates for next year envisage no reduction in next year's public sector financing requirement, this year's favourable balance of payments position is likely to worsen in 2001.

The slowdown in the disinflation process calls for tighter monetary conditions. By contrast, international capital market developments and the slower-than-expected decline in domestic inflation caused the two components of monetary conditions to move in mutually opposing directions. The fact that the European Central Bank raised its leading rates by altogether 75 basis points since April shifted imported monetary policy in the required direction. However, this effect was offset by the drop in the required risk premium on the forint, with nominal interest rates falling at all maturities from the beginning of June, after having risen from the March introduction of the NBH bill until late May. The Government and the National Bank saw no possibility to cut the rate of devaluation in the course of this year, as they were determined to prevent the emergence of negative backward-looking real rates of interest under all circumstances. However, because of the higher-than-expected rate of inflation, the unchanged devaluation rate called for the tightening of monetary conditions. Nevertheless, the Bank launched auctions of three-month bills as a means of forestalling an unreasonable decline in yields.

Demand for forints was shaped by contrasting influences. The second quarter saw a withdrawal of portfolio capital funds in the wake of stronger uncertainty on global capital markets and certain domestic events (such as the controversy between the Government and the Hungarian oil company MOL about fuel prices), with interest-sensitive capital items also characterised by net outflow. As these effects were successfully offset by the high rate of direct investment and a favourable current account position on the balance of payments, the exchange rate of the forint continued to fluctuate without interruption near the strong edge of the intervention band. A change in the atmosphere of international capital markets triggered another pick-up in interest-sensitive capital inflow, prompting the National Bank to intervene at the strong edge of the band on several occasions after the first of August. This inflow of capital occurred against a backdrop of further falls in the interest rate premium, which temporarily sank to below 200 basis points. The average time to maturity of foreigners' government security holdings also shortened, suggesting the probability of strengthening revaluation expectations. Domestic market participants also increased their forint positions, a fact reflected in recent stronger foreign-exchange-denominated borrowing by the corporate sector.

Main macroeconomic indicators						
	1999				2000	
	Q1	Q2	Q3	Q4	Q1	Q2
	<i>Growth rate (at constant prices) Percentage changes on a year earlier</i>					
GDP*	3.5	3.9	4.5	5.9	6.6	5.9
Of which: domestic absorption	5.4	4.3	2.4	5.0	5.7	3.8
– final consumption	4.6	4.4	4.3	3.8	3.0	3.5
= household consumption	4.5	5.0	4.5	4.4	3.3	3.7
– investment	7.6	4.0	–1.6	7.6	12.8	4.5
= fixed investment	6.4	6.8	4.2	8.1	7.0	5.5
Exports (GDP)	9.5	9.8	13.6	18.9	20.7	20.6
Imports (GDP)	12.9	10.2	9.3	16.6	18.3	16.2
	<i>Real effective exchange rate index**</i>					
On CPI basis	2.8	0.3	–3.5	–5.7	–3.1	–1.0
On PPI basis	5.2	1.9	–2.5	–6.6	–5.8	–4.9
On unit labor cost basis (on value-added basis)	6.4	5.0	4.7	3.2	4.9	6.3
On unit labor cost basis (on gross output basis)	8.5	6.5	7.3	6.5	10.1	11.9
	<i>As a percentage of GDP</i>					
General government deficit (cash flow basis)***	–10.1	–5.0	–2.7	–1.0	–3.6	–2.3
General government primary balance***	–0.2	0.3	3.7	3.6	3.5	2.8
	<i>EUR billions</i>					
Current account balance	–0.5	–0.6	–0.1	–0.8	–0.4	–0.5
Foreign direct investment (net)	0.3	0.3	0.3	0.7	0.2	0.7
Savings rate**** (%)	8.5	6.4	6.9	8.4	6.7	5.7
Unemployment rate + (%)	7.1	7.0	7.0	6.8	6.5	6.5
Wage inflation ** (Same period a year earlier = 100 %)	15.3	16.3	14.5	14.6	11.6	13.3
Net average per capita income in real terms*** (Same period a year earlier = 100 %)	5.0	5.0	3.6	3.8	2.1	3.3
<p>* Based partly on National Bank estimates.</p> <p>** Positive figures indicate real depreciation; nominal exchange rate indices are calculated with market exchange rates from 1995; Deflators refer to the manufacturing industry.</p> <p>*** Only estimates as there are no appropriate quarterly data for local governments.</p> <p>**** Net financial savings of households as a percentage of total household income. (Net financial savings do not include the revaluation total due to exchange rate changes and other factors.)</p> <p>+ Based on the labour market survey of the Central Statistical Office: unemployed people as a percentage of the active population, seasonally adjusted data.</p> <p>** Wage inflation indicator constructed by the Bank, see June 2000 Report. As the indicator cannot be calculated for the pre-1999 period with a method consistent with the one used subsequently, the Report publishes no data for the preceding years.</p> <p>***National Bank estimates for the net earnings of employees in companies employing at least five people and the full fiscal sector, taking account of the effect of income tax change.</p>						

Main monetary indicators										
	1998				1999				2000	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
	<i>Percentage changes on a year earlier</i>									
Inflation (CPI)**	16.4	14.2	12.5	10.3	9.3	9.1	10.9	11.2	9.6	9.1
Producer price index**	13.5	11.6	10.4	7.1	4.9	4.5	4.8	8.2	9.9	11.6
Devaluation rate of the forint's central parity	12.9	12.2	11.4	10.3	9.4	8.4	7.5	6.5	5.9	5.0
	<i>Real growth of monetary aggregates*</i>									
	<i>Percentage changes on a year earlier</i>									
M0	1.7	3.3	3.7	5.8	8.5	7.9	3.9	11.5	6.2	5.1
M1	6.7	9.1	7.9	6.1	7.1	6.3	5.6	6.8	6.9	7.6
M3	2.3	4.0	4.6	4.4	8.0	7.1	5.0	4.3	5.0	4.2
M4	10.0	9.8	9.4	9.4	9.1	9.0	7.7	6.9	6.6	6.5
	<i>Real growth of the stock of lending by financial institutions*</i>									
	<i>Percentage changes on a year earlier</i>									
Corporate sector, foreign + domestic*	13.1	14.5	16.4	11.2	13.4	10.8	7.0	13.4	17.3	22.6
Corporate sector, domestic	14.5	15.5	15.6	9.9	11.0	7.2	3.5	11.3	15.7	20.7
Household	-11.4	-2.4	2.4	0.8	11.6	14.0	17.8	20.4	28.0	30.6
	<i>Interest rates (%)**</i>									
Reverse repo/one month deposit***	18.75	18.00	18.00	16.75	16.00	15.25	14.75	14.25	11.25	11.00
90-day Treasury bill	18.65	17.33	19.06	16.10	15.68	14.74	14.07	12.44	10.63	10.50
12-month Treasury bill	18.70	17.32	18.96	15.88	15.61	14.77	14.17	12.33	10.42	10.42
3-year Treasury bond	17.42	16.31	18.00	14.18	14.01	14.03	13.45	10.75	9.09	9.43
Budapest Stock Exchange (BUX)	8,656	7,806	4,571	6,308	5,490	6,486	6,747	8,819	10,000	8,318
Interest rate premium (bsp)****	364	363	674	533	531	551	551	426	309	227
	<i>Conversion</i>									
Conversion, EUR millions*	2,253	850	-1,996	-175	313	239	1,211	1,043	1,466	79
Banking sector net foreign borrowing,† EUR millions*	854	231	-617	-158	7	-173	151	312	707	8
Corporate sector net borrowing, †† EUR millions*	384	-24	209	579	109	753	390	316	-199	-271

\* Based on methodology considerations, the Bank has retroactively revised the monthly balance of payments accounts, as well as certain entries for foreign-related assets and liabilities published for 1995–1999.

\*\* At the end of the period, in respect of government securities, reference yields of the State Debt Management Centre.

\*\*\* The maturity of the reverse deposit facility was reduced from one month to two weeks as of January 8, 1999.

\*\*\*\* Interest rate premium: excess yield on three-month T-bill investment over the devaluation rate and foreign interest rates. The current devaluation rate was modified upon official announcement of the change.

† Excluding privatisation revenues.

†† Including inter-company loans.

# I. Inflation

The previously clear-cut decline in inflation came to an end after the second quarter of 2000. The twelve-month *consumer price index* rose from 9.1% in June to 9.6% in July, and the annual *core inflation* index rose by 0.4%, edging up to an annual rate of 7.4%. This signalled a return to rates measured in March and April in respect of both indicators. The annual price index of *foodstuffs* rose to 11.8% in July as a result of an upward trend which began in March 1999. The annual price index of *market services*, crucial to the analysis of the inflation process, edged up slightly in the second quarter following stagnation during the first quarter. In contrast, the rate of price increases in the group of industrial goods, directly influenced by monetary policy through the control of the exchange rate path, remained flat, although the steady disinflation seen earlier also ceased, with the annual index stabilising at 4.8% (see *Chart I-1*)

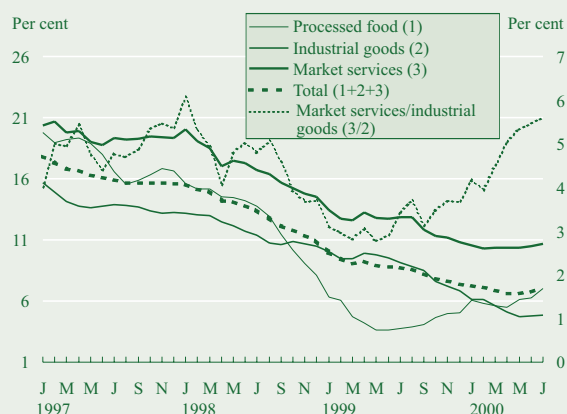
As a result of the inflationary shock affecting the euro area and Hungary over the past few months, there was an approximately 0.5% rise in the twelve-month rate of inflation for the EMU over the three months from April to June. Factors similarly affecting the Hungarian economy (including high oil prices and the weak euro), with the additional effect of the July price shock in unprocessed foodstuffs in Hungary, led to the interruption of the disinflation process. As a combined result of these two effects, inflation convergence, measured in terms of an index comparable with the harmonised price index of the euro area (MUICP), was interrupted (see *Chart I-2*).

Hungarian disinflation has recently been adversely affected by the significant price increases in unprocessed foodstuffs (with an annual index of nearly 24% in July), especially in comparison with plummeting prices last year, as well as by the sharp rise in world oil prices, which have tripled in forint terms. As, by their nature, these two factors only cause one-off increases in the price levels of the commodities involved, and are not likely to recur (indeed, the possibility of correction remains open), it is hoped that their impact on price indices will only be temporary.

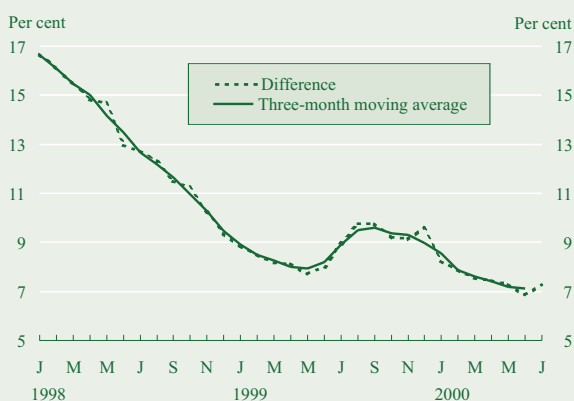
Nevertheless, the fact that the inertia reflected in the private sector's nominal wage inflation poses a threat to the continuation of disinflation is a cause for concern. While industrial goods prices are adequately controlled by the exchange rate path, market services price inflation may become chronic as a consequence of potentially high, persistent wage inflation, hampering disinflation in the overall price index.

In spite of the aforementioned adverse developments, April's pre-announced 0.1-percentage-point cut in the forint's monthly devaluation rate to 0.3% had a favourable impact on inflation. As the strong relation between the designated exchange rate path

**Chart I-1 Inflation in respect of major aggregates**



**Chart I-2 Inflation convergence: difference between the harmonised price indices of Hungary and the euro area\***



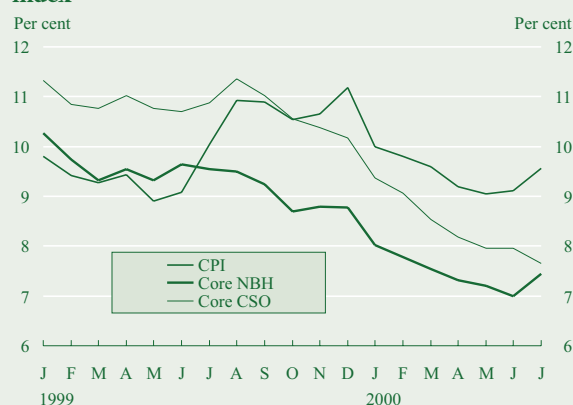
\* In terms of an indicator consistent with the harmonised price index published by the CSO; the National Bank's own calculation.

**Table I-1 Inflation rate of different goods and services \***  
Percentage changes on a year earlier

	Weight in CPI	Dec. 1999	2000						
			Jan.	Feb.	March	Apr.	May	June	July
<b>Consumer Price Index (CPI)</b>	<b>100.0</b>	<b>11.2</b>	<b>10.0</b>	<b>9.8</b>	<b>9.6</b>	<b>9.2</b>	<b>9.1</b>	<b>9.1</b>	<b>9.6</b>
Of which:									
Industrial products, excluding food, alcohol, tobacco and petrol	29.6	6.9	6.1	6.1	5.6	5.1	4.7	4.8	4.8
Petrol	4.9	37.8	30.7	32.4	36.7	29.7	29.6	33.4	27.9
Non-regulated household energy prices	1.3	16.5	13.4	12.1	12.7	17.3	17.9	17.6	21.5
Food	19.1	5.4	5.7	5.4	5.6	6.3	6.8	6.4	11.8
Regulated prices	18.0	17.6	13.9	12.6	10.9	10.2	9.3	9.4	7.2
Of which: Energy	7.3	6.2	6.2	6.1	5.1	5.3	5.3	5.5	4.8
Services	9.0	18.7	11.7	9.3	8.8	7.4	5.7	5.6	5.5
Market services	17.6	11.0	10.8	10.3	10.3	10.4	10.3	10.5	10.7
Alcohol and tobacco	9.4	10.6	10.9	11.9	11.7	11.5	11.2	10.5	9.9
Core inflation	89.9	8.8	8.0	7.8	7.5	7.3	7.2	7.0	7.4
Depreciation of the nominal effective exchange rate		2.7	4.2	5.0	4.1	5.4	6.8	6.2	6.0
Pre-announced nominal devaluation of the forint		6.7	6.4	6.2	6.0	5.7	5.4	5.1	4.8

\* The classification of items included in the consumer basket is different from that applied by the Central Statistical Office. See the Bank's *Quarterly Inflation Reports* for more details.

**Chart I-3 Core inflation and the consumer price index**



**Table I-2 Constituents of the difference between NBH core inflation and the consumer price index**

	Per cent		
	May/May	June/June	July/July
Unprocessed foodstuffs	-0.11	-0.01	0.66
Household energy + vehicle fuels	1.23	1.41	1.11
Pharmaceuticals	0.73	0.73	0.35
Total	1.85	2.13	2.12
CPI	109.0	109.1	109.6
NBH core inflation	107.2	107.0	107.4

**Table I-3 Constituents of the difference between the core inflation indicators constructed by the CSO and the NBH**

	Weight in CPI	May/May	June/June	July/July
Pharmaceuticals	1.7	0.83	0.83	0.41
Energy	7.8	0.09	0.07	0.08
Unprocessed food	3.1	-0.15	0.07	-0.27
Total		0.76	0.97	0.22
CSO core inflation	80.5	108.0	108.0	107.7
NBH core inflation	89.7	107.2	107.0	107.4

and the industrial goods price index is still in place, the recent slowdown of disinflation within this category represents no cause for concern.

The recent negative tendencies within the category of prices particularly exposed to one-off shocks (such as energy and food prices) – especially against the background of last year's favourable developments – halted disinflation in the overall consumer goods category. Although the authorities made full use of the instruments at their disposal (stringent control of regulated prices and public sector wages), in order to alleviate the unfavourable impact, all this proved to be insufficient to fully neutralise the effect of input prices and, in respect of agriculture, the export demand price shock. These factors may be built into inflation expectations, as is probably reflected in the stagnation of services price inflation, which is less influenced by external factors and exchange rate policy (see Table I-1).

As explained at length in the December 1999 *Inflation Report*, the *core inflation indicator* published by the National Bank of Hungary is intended to give a concise, clear-cut and transparent description of inflation factors considered relevant for the Bank. Differences between core inflation and the full consumer price index are summarised in Table I-2. The annual core inflation index rose from 7% in June to 7.4% in July, due to a one-off jump in unprocessed food prices (see Chart I-3). On the basis of the information available it cannot be said for certain whether the increase is a temporary phenomenon or whether the rise in core inflation marks a turning point in the trend of inflation.

In addition to the CPI, the Central Statistical Office also publishes a core inflation index. As explained in detail in the December 1999 *Report*, unprocessed foodstuffs are entirely excluded from the CSO's core inflation indicator, while the index calculated by the Bank filters out only the effects of highly problematic items, whose prices exhibit strong unstable seasonality. The discrepancy between the Bank's and the CSO's annual indices diminished substantially during July, due to two factors with nearly equal impact: the pharmaceuticals prices excluded by the Bank put downward pressure on the index calculated by the Statistical Office relative to last year's high base level, while certain unprocessed foodstuff prices which were included by the Bank, but not by the Statistical Office, did not raise the CSO's core inflation index, which thus fell to 17.7% in July (see Table I-3).

## 1 Imported inflation

In 2000 Q2, commodity prices excluding energy dropped by 3% in USD terms, in contrast with the upward trend observed from mid-1999. It was metal and beverage prices that fell most strongly, by around 5–7%, while food prices lingered at the level seen during the previous quarter. Following a rise of over 200% over the previous four quarters, oil prices did not come down, despite the OPEC's decision in late March to ease supply restrictions (see Table I-4).

In 2000 Q2, the *import unit price index* rose by 13.9%, compared with 10.9% in the previous quarter. This was 8.7% higher than the pre-announced devaluation rate. A comparison of the

import unit value index with the nominal effective exchange rate index reveals a somewhat smaller difference of 7.8%, basically due to cross exchange rate changes. The strengthening of the imported inflation process is also reflected in the fact that the indicator calculated with effective foreign prices<sup>1</sup> was up 10% on a year earlier. This indicates that there is a link between imported inflation and inflation experienced by Hungary's main trading partners, related, to a considerable extent to cross exchange rate effects (see Chart I-4).

In contrast to the preceding period when they exerted downward pressure on imported inflation, prices of machinery imported from developed countries rose at a higher rate in the second quarter than the pre-announced devaluation rate of the forint's exchange rate. Prices in this category rose by 5.8% on a year earlier. There was no change in respect of tendencies observed over the first quarter, with import prices from Central and Eastern Europe soaring by 41% as a result of energy price increases.

Looking at individual product categories, energy import prices rose by 87.5% in a year-on-year comparison. Imported food, beverage and tobacco price inflation also gathered pace (8.9%), while the rate of increase in machinery and equipment prices, previously slightly in excess of 5%, accelerated to 7.4%. Manufactured goods and raw materials import prices rose by 12.7% and 19%, respectively. Thus, the pick-up in the rate of imported inflation is equally attributable to the effect of energy and raw material prices, to the general upward trends being experienced by Hungary's main trading partners, and to cross exchange rate effects.

As a result of world prices for energy, which, although unchanged relative to the first quarter, were rather high in comparison with the previous year, and the weak euro, the second quarter witnessed further consumer price increases in euro-area countries. Hungary's main trading partners experienced an increase in the twelve-month rate of inflation from 1.9% in April to 2.4% in July. In July, the consumer price level in Germany, France and Austria reached the 2% ceiling set by the European Central Bank, while in the other member countries it climbed even higher. The highest rate of inflation, 5.9%, was registered within the Irish economy, characterised by exceptionally rapid growth.

In June, twelve-month inflation in the United States once more hit the March rate of 3.7%, the highest level recorded over the last several years. The main factor in the relative acceleration of prices was the increase in oil prices over the level seen in 1999. On the other hand, against the background of robust economic growth, the 2.6% rate of core inflation appears to be moderate and does not signal a rise in inflationary pressure. The twelve-month inflation rate sank to 3.5% in July.

The twelve-month CPI in the Czech Republic rose from 3.8% in March to 4.1% in June. Since the higher-than-expected increase is primarily attributable to rising world prices for crude oil, it is not feared that there will be any major rise in inflationary pressure, with the 1997–99 recession over and the Czech economy on the path to recovery. In Poland the twelve-month rate of consumer price inflation remained virtually unchanged over the first six months of the year, hovering at around 10% (see Table

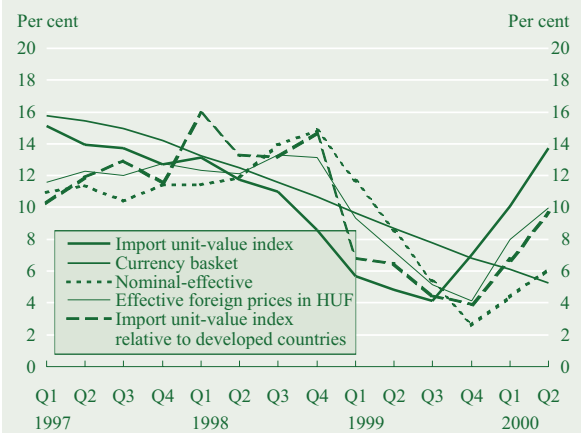
<sup>1</sup> The imported inflation indicator calculated with effective foreign prices is constructed by multiplying the weighted average of the producer price indices of our main trading partners by the nominal effective exchange rate index.

**Table I-4 World market price levels in 1999-2000**  
Percentage changes relative to the average for 1995

	1999				2000	
	Q1	Q2	Q3	Q4	Q1	Q2
Commodities excluding						
energy	75.7	74.5	75.1	78.1	79.3	77.0
Food	78.9	73.9	72.0	72.3	74.4	74.0
Beverages	79.0	73.4	65.3	74.9	68.1	63.2
Agricultural						
raw materials	75.6	75.7	77.1	80.8	80.6	78.7
Metals	68.2	72.0	78.5	82.0	87.2	82.5
Crude oil	68.5	95.1	120.1	138.0	154.6	155.8

Source: IMF IFS.  
\* World prices in US dollars.

**Chart I-4 Changes in import prices and various exchange rate indices**

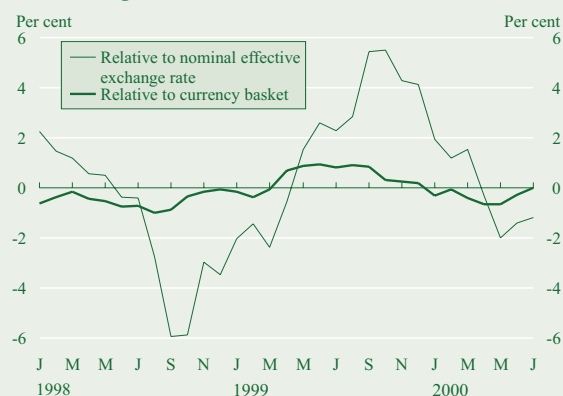


**Table I-5 International inflation data, 1999–2000**  
Percentage changes on a year earlier

	December 1999		March 2000		June 2000	
	Producer	Consumer	Producer	Consumer	Producer	Consumer
	price changes					
United States	3.0	2.7	4.5	3.7	4.8	3.7
Japan	-1.5	-1.1	n/a	-0.6	n/a	-0.7
Germany	1.0	1.2	2.1	2.1	2.9	1.9
Czech Republic	3.2	2.5	5.1	3.8	5.0	4.1
Poland	7.1	9.8	7.3	10.3	8.7	10.2
Hungary	6.9	11.2	9.9	9.6	12.0	9.1
EU-11	4.0	1.7	6.2	2.1	5.6	2.4
EU-15	n/a	1.7	n/a	1.9	n/a	2.1

Source: Global Data Watch, J.P. Morgan's figures for 2000.

**Chart I-5 Twelve-month relative inflation rate of industrial goods**



I-5). The increase relative to the under-6% low point measured in April 1999 is largely due to the extreme volatility of food and energy prices. The considerably higher-than-expected 11.6% inflation rate in July was also a consequence of food and energy price increases (see Table I-6).

## 2 Components of changes in consumer prices

The annual rate of inflation of *industrial goods* prices, which have a weight of 29.2% in the consumer basket and are crucial to monetary policy, stood at 4.8% in July. This means that the price index for this category remained unchanged in 2000 Q2, in contrast to the steady disinflation seen over the preceding twelve months. This interruption in the disinflation process is regarded as being a short-term phenomenon similar to those experienced earlier. It is considered to have only a short-term effect, as the relative (annual) inflation rate of industrial goods prices – in comparison with the rate at which the forint's exchange rate is being devaluated – continued to fluctuate in the  $\pm 1$  per cent range prevalent for a long time, in evidence of the fact that the pre-announced path for the exchange rate continues to fulfil the nominal anchor function (see Chart I-5).

Prices in this category are essentially determined by the exchange rate path and the inflation rate of Hungary's trading partners. Although euro-area inflation has recently exceeded the ECB ceiling, it was the jump in energy and service prices that made the greatest contribution to the upsurge in inflation in the euro area as well. Tradable goods price inflation (excluding energy) in the euro area is stable at 0.6% per year. The indirect implication is that the oil price shock will not be incorporated into industrial goods prices over the short term, which is not inconsistent with the Hungarian experience.

The other highly sensitive measure of inflation is market services, representing 16.4% of the consumer basket. In contrast to industrial goods, prices for services cannot be directly influenced by monetary policy. Disinflation in this category clearly stopped, and the flat level of the index in the first quarter was replaced by a slightly upward trend. In consequence, the difference between the rates of tradable goods price inflation and market services price inflation rose to 5.6% in July for the year as a whole, implying a corresponding rise in the relative non-tradable / tradable inflation rate.<sup>2</sup> The persistent discrepancy between the price indices for industrial goods and market-priced services is explained by the Balassa-Samuelson effect, i.e. the fact that productivity in manufacturing is growing at a faster pace than in the ser-

<sup>2</sup> It is only in its name and, in a certain sense, its economics content, that the domestic real exchange rate relates to the actual nominal exchange rate of the national currency, measuring, as it is, changes in the relative price level of non-tradable services and tradable industrial goods, in the form of the ratio of the price indices for the two categories. Thus it does not contain the exchange rate in any direct way. For more on the internal real exchange rate, see Kovács-Simon (1998/3) and Ferenczi-Valkovszky-Vincze (2000/5) in the National Bank's Working Paper series.



vice sector. Although the same phenomenon is also observable in more advanced economies, for example for the past five years service prices in the euro area have been rising at an annually 0.9-2.3 % higher rate than industrial goods prices (excluding energy), the effect is much more pronounced in respect of a less developed country in the process of modernising its economy. The National Bank is convinced that given the considerable productivity growth in Hungarian manufacturing, the annual inflation differential of 4-6% may be sustainable over the longer term, and the low rate in 1999 – merely 3% annually in 1999 Q2 – was the result of temporary factors (see Chart I-1).

Consistent with the methodology introduced in the December 1999 *Report*, market services are divided into sub-categories referred to as *demand-sensitive* (with a weight of 8.1%), *energy-sensitive* (0.3%) and *other market services* (7.9%). Analysis of these groups indicates that although demand-sensitive price inflation continues to be high within service price inflation (12.2% annually), the rate of price increases within this category appeared to be stable in the previous quarter. The implication is that the acceleration in the first quarter – as noted in the June *Inflation Report* – was merely temporary, in other words, data in this series reflect no demand-side inflationary pressure. Other market service prices rose at a faster pace than in the previous quarter, namely by 8.8% in July, while the price level of the energy-sensitive group was up by 18.6% in July, as a result of the upsurge in the forint price for crude oil (see Chart I-6).

Within foodstuffs, there is a clear distinction between *unprocessed* and *processed foodstuffs* in terms of the statistical behaviour of the series. The former accounts for 5.4% of the consumer basket and the latter for 13.8%. The recent trend in domestic unprocessed food prices has been fundamentally affected by a combination of the earlier demand-side shock and this year's supply-side shock affecting Central and Eastern European markets. The Russian crisis of 1998 and 1999 depressed demand for the region's agricultural exports to a considerable extent, entailing a significant drop in prices. Owing to the subsequent correction, the low base-period data tend to lead to high annual price indices. This effect was further aggravated by the negative supply shock (due to the weather) symmetrically affecting the main food exporters of the region.

Looking at the cost of energy, there is a widening gap between centrally controlled and market-determined prices. *Centrally regulated energy prices* – with a weight of 7.2% – have been rising at a subdued rate, not exceeding the preannounced average annual rate of 6% since the beginning of the year, as part of the government's strict policy. However, the index of *market-determined energy prices* – with a weight of 1.5% – gives the impression that government pressure here can restrain inflation over the long term only at the expense of creating significant tensions (see Chart I-8).

The previous tendencies observed in connection with *excisable goods*, accounting for 14.1% of the consumer basket, continued. Although still outstripping the overall consumer price index, annual inflation in *alcohol and tobacco prices*, with a weight of 9.1%, has been falling during the year, thanks to only moderate rises in excise taxes. The annual rate of inflation in this category amounted to 9.9% in July. By contrast, *petrol* prices rose at an exceptionally high rate of nearly 28% over the past 12 months, as a

Chart I-6 Composition of market services

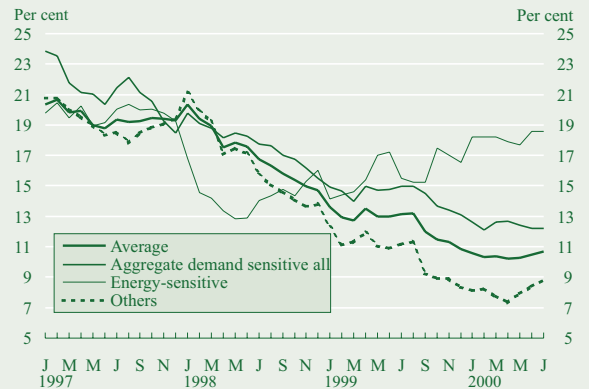


Chart I-7 Food price inflation

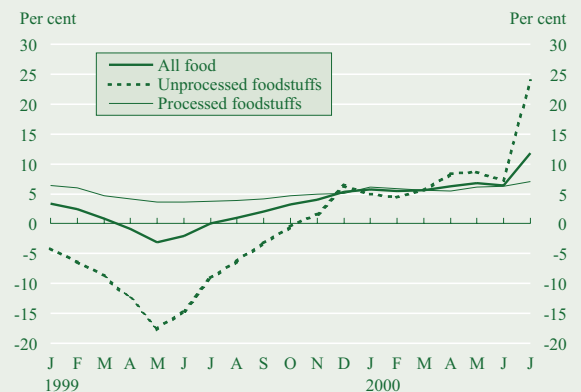


Chart I-8 Energy prices

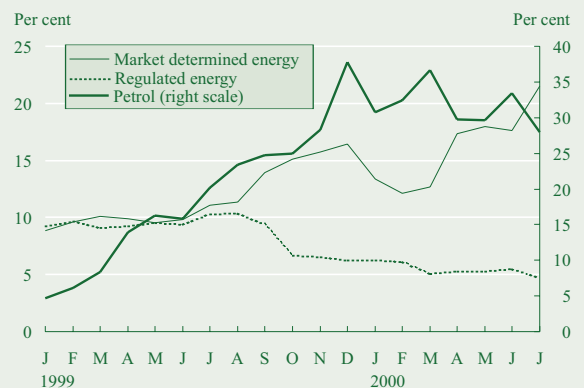


Chart I-9 Prices of excisable goods

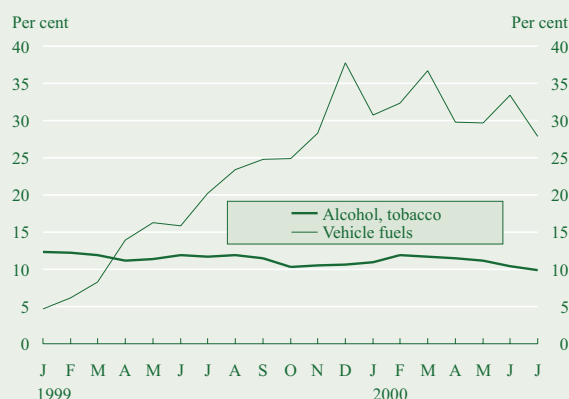
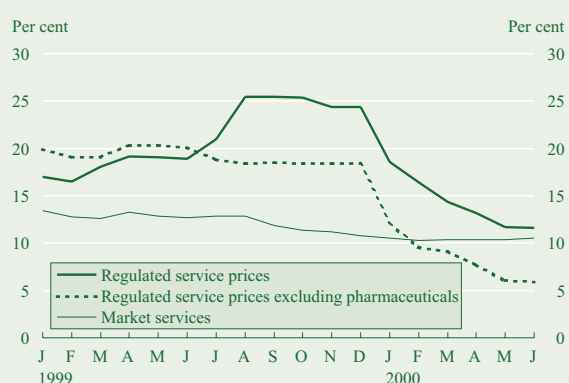
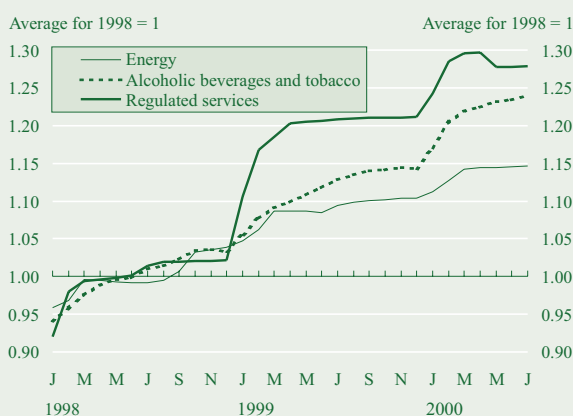


Chart I-10 Services price inflation

Chart I-11 Regulated energy and service price levels  
1998 = 1

result of soaring world prices for oil (in dollar terms) and the low exchange rate of the euro – and, consequently, the forint – against the dollar (see Chart I-9). On account of the 4.9% weight of petrol in the consumer basket, this caused an “unexpected” addition of approximately 1% to the rate of inflation over the past twelve months.

Tight central anti-inflation policy exerted a downward pressure on regulated price inflation. The annual price index of *regulated services* of 8.7% – accounting for 11.4% of the consumer basket, of which 1.75% is represented by pharmaceuticals – was well below that of market services (10.7%) (see Chart I-10). The discrepancy is even more noticeable if the pharmaceuticals item,<sup>3</sup> introducing a bias into the price index, is excluded from the regulated services, as the resulting index shows an annual rate of inflation as low as 5.9% in the last quarter.

As a result of the above-noted stringent central price measures, *regulated energy prices*, the other component of centrally controlled prices, accounting for 7.2% of the consumer basket, rose only by 4.8% over the year to July for the year as a whole. The twelve-month inflation rate of the overall regulated price category amounted to 7.2% on average, which, however, reflected the effect of price increases that occurred last year and early this year, with the average level of regulated prices remaining virtually unchanged since April. July data indicate that the rate of inflation of regulated goods and services prices slowed by 10 percentage points relative to a year earlier. This depressed the overall CPI by half a percentage point (see Chart I-11).

In consequence of the above, the fact that regulated prices increased this year at a more subdued rate than last year can be more accurately illustrated by an indicator measuring price change “effective” in the current year rather than looking at twelve-month changes in the price level.<sup>4</sup> This way it is possible to ignore the inflationary effect of price measures implemented in the period between May and December 1999 (it should be noted that a major factor in this effect from 1999 is last year’s pharmaceuticals price increases). Price changes taking effect in 2000 raised regulated prices by 4.5% in the period between January and July, which is fully attributable to measures taken during the first few months of the year, as shown by the final two columns of Table I-7. In the period since the June Report, more particularly from May to July, regulated prices remained flat or rose only to a small extent, largely because increases were concentrated in the first part of the year. Thanks to discount rates and special sales campaigns, prices for telephoning, with a high weight in the consumer basket, fell rather than rose, reducing the rate of overall regulated price inflation by 0.8% on average (see Table I-6).

<sup>3</sup> As analysed at some length in the National Bank’s September 1999 *Inflation Report*, the method used by the Statistical Office leads to some bias in the measurement of price changes related to actual pharmaceuticals consumption in 1999 Q3. As most of the price change took place in August, the (upward) bias due to the base period effect, is also present in the July 2000 index. Admittedly, the omission of pharmaceuticals also introduces a bias into the index, but in this specific case, this bias is likely to be much smaller.

<sup>4</sup> See last three columns of Table I-6.

**Table I-6 Centrally regulated or influenced prices \***  
Year-on-year and seven-month (in 2000) growth rates \*\*

	Weight in 2000	December 1999	Twelve-month price indices				Seven-month price indices		Difference in % points 1999-2000	April-July	May-July
			2000				1999	2000			
			April	May	June	July					
Controlled prices	17.99	17.6	10.2	9.3	9.4	7.2	14.6	4.5	-10.1	-0.5	-0.6
Goods	8.99	16.4	13.4	13.5	13.7	9.0	10.8	3.7	-7.1	0.4	0.2
Of which:											
Household energy	7.29	6.2	5.3	5.3	5.5	4.8	5.3	3.9	-1.5	0.4	0.2
Central and district heating	1.84	6.0	6.3	6.1	6.3	6.6	3.3	4.0	0.7	1.5	0.7
Electricity	3.29	10.1	7.4	7.6	7.8	7.7	8.7	6.3	-2.3	0.0	0.0
Gas supplied through pipes	2.16	1.1	1.1	1.1	1.4	-1.2	2.3	0.0	-2.3	0.0	0.0
Pharmaceuticals, medical products	1.70	56.9	43.4	43.5	43.5	22.0	32.7	3.2	-29.5	0.4	0.1
Services	9.00	18.7	7.4	5.7	5.6	5.5	18.4	5.3	-13.1	-1.3	-1.4
Of which:											
Housing	2.48	15.3	12.9	12.7	12.3	12.3	14.3	11.4	-3.0	1.3	0.7
Transport	1.89	13.4	6.1	6.1	6.1	6.1	13.4	6.1	-7.3	0.1	0.0
Telecommunications	3.78	25.3	6.1	2.2	2.1	2.1	25.3	2.1	-23.2	-4.2	-3.8

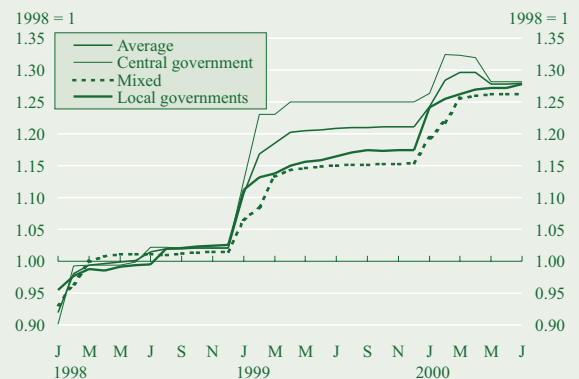
\* Television subscription fees, carrying a 0.66% weight in the consumer price index, have been divided into a centrally regulated portion (0.31%) and a market subscription fee (0.36%). Regulated prices include only the former component, which has not changed since last year.

\*\* Due to rounding, sums do not always add up accurately.

It should be noted, however, that the July rise of 12% in natural gas prices has not yet been incorporated into the price level, as it will only be reflected in household expenditures after a time lag of one or two months. This, combined with a planned rise (in the price of district heating in October), is expected to produce a 7% rate of twelve-month inflation in respect of regulated prices.

It seems worthwhile to review *regulated service prices* in respect of the regulating authority involved. This way it will be possible to judge the actual results of the government's anti-inflationary commitment as the influence the government exerts over non-centrally controlled prices exists only in a rather indirect way. In respect of services, prices did not increase in the *central government* controlled categories (such as telephoning, postal services, gambling, television subscription fees), with even a decrease in the price level of telephoning, as noted above, bringing down the twelve-month inflation rate to 2.5%. Prices in categories subject to *mixed* control also rose only minimally over the past few months. It should be underlined that, consistent with the pre-determined schedule, there has been no change in *transport service* prices ever since April, even in the face of higher-than-expected fuel price increases. As far as *local government*-controlled prices are concerned, extra costs were passed through to consumer prices, as reflected in the 1.3% overall increase in the price of housing-related services (including rent, water supply, sewage and garbage disposal) implemented since April (see *Chart I-12*).

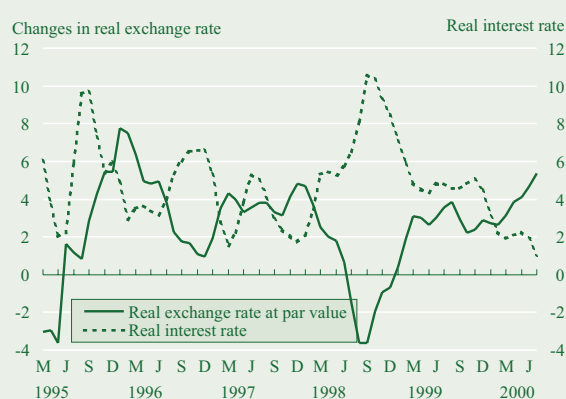
**Chart I-12 Breakdown of regulated price levels according to regulating authority**



\* The demand-sensitive group includes restaurant and canteen catering, snack-bar goods, repair, health, beauty and educational services, cultural and entertainment services, and domestic holiday-related travel, which combined account for 53% of all market services. Taxi and haulage services (2%) require considerable energy input. Other items not included in the above categories (e.g. school and nursery school meals, newspapers, books, periodicals, housing repairs and maintenance services, holidays abroad, other services) account for 45% of market services.

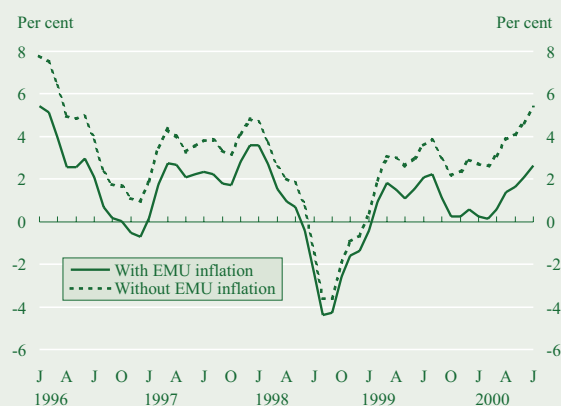
## II. Monetary policy

**Chart II-1 Changes in monetary conditions\***



\* For a description of the method of calculating monetary conditions, see Box II-1.

**Chart II-2 Monetary conditions real exchange rate indicators: old and new**



### 1 Monetary conditions and changes in the interest rate and the exchange rate

The Hungarian economy grew at a rate of 5.9% in the second quarter of 2000. The driving force behind this growth continued to be export sales, while domestic absorption increased at a subdued rate, thus maintaining a favourable external equilibrium position along with robust growth. The previously experienced decrease in inflation was halted in 2000 Q2, with the core measure of inflation also reflecting a slowdown in disinflation. Hungary's main trading partners were also affected by shocks which triggered price increases, but inflationary pressure in the euro area was lower than that in Hungary. As a result, by July, the long-standing process of inflation convergence had stopped. There is a risk that this inflationary shock will cause expectations to remain stuck at the current level, which may in turn strengthen the inertial components of inflation.

Macroeconomic processes continue to call for a tight monetary policy. In 2000 Q2, the two components of monetary conditions developed in mutually opposing directions (see Chart II-1). Although the devaluation rate remained unchanged after April, a higher-than-expected inflation exerted upward pressure on the rate of real appreciation. By contrast, real interest rates sank below 2%. Taking account of the fact that euro-area inflation is also subject to change, the Bank has now introduced a new way of calculating the real exchange rate component of monetary conditions. Previously euro-area inflation was assumed to be constant since the variance of Hungarian inflation exceeded it by an order of magnitude. However, now that the Hungarian consumer price index is within the single-digit range, fluctuations in the rate of European inflation may lead to considerable change in the path of the real exchange rate. Therefore, from now on a real exchange rate indicator containing European inflation is being analysed. For an explanation of the monetary conditions index in more detail, see Box: II-1. As the indicator computed with the new method shows a similar change in the real exchange rate as the old one, the current path of the real exchange rate has called for the tightening of monetary conditions over the recent term. Nevertheless, the rate of appreciation is smaller in terms of the new indicator (see Chart II-2).

The Bank successfully slowed the decline in real interest rates by launching its own three-month bill in March. Under the prevailing monetary regime, real interest rates on the forint are given as the sum of euro real interest rates, the forint's real appreciation

### Box II-1 Background of calculating monetary conditions

Many countries use a so-called monetary conditions index (MCI) to evaluate monetary policy, attempting to capture the nature of the policy in one single number. The relative weight of the two components of the MCI, the real interest rate and the real exchange rate, is usually model-dependent. Due to lack of sufficient data, modelling is problematic in Hungary, therefore the National Bank cannot reliably compute a similar index. Nevertheless, it is certainly worthwhile to study the changes in the two components which determine monetary conditions.

Since the purpose of the real interest and exchange rate indices published in the *Report* is to track short-term changes in monetary conditions, these indices are calculated with a view to minimising the effect of occurrences taking place outside of the reviewed period, also known as the base-period effect. In order to mitigate this base-period effect, it is not the standard twelve-month inflation indices that are used, but monthly inflation. The problem with monthly inflation rates, however, is that they exhibit too much noise and seasonality, which have to be removed. In order to do so, the price level is adjusted seasonally, and the monthly inflation rate is derived from the adjusted level series. In order to minimise the noise and smooth the inflation series, the trend-cycle of the price level is used to calculate 3-month inflation rates.

Let us denote the seasonally adjusted trend price level in Hungary with  $P(t)$  and that in the euro area with  $P^*(t)$  at time  $t$ . With  $R(t)$  being the interest rate on three-month Hungarian treasury bills at time  $t$ , and  $E(t)$  the nominal exchange rate index at time  $t$ , the real interest rate  $r(t)$  and the change in the real exchange rate  $ed(t)$  at time  $t$  is given as:

$$r(t) = ((1 + R(t)/400) / (P(t)/P(t-3)) - 1) * 400$$

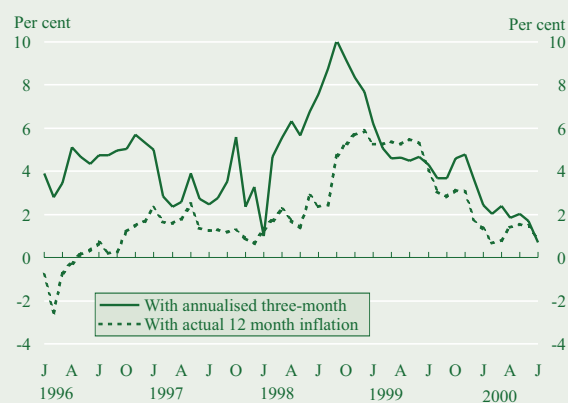
$$ed(t) = (((P(t)/(P^*(t)E(t)))/(P(t-3)/(P^*(t-3)E(t-3))))^{4-1}) * 100$$

Prior to April 1995, the exchange rate index,  $E(t)$ , is represented by the nominal effective exchange rate index. Subsequently, the exchange rate index is derived using the official rates of devaluation until the present day.

*Chart II-3* illustrates the way how the use of the short-term measure of inflation affects the real interest rates calculated. The conventional method of calculating the real interest rate normally takes into account inflation over the previous twelve months. However, if inflation follows a downward trend, looking back on the inflation of the past twelve months will regularly produce lower real interest rates, thus the short-term index based on annualised seasonally adjusted inflation of the past three months will measure actual real returns or burdens with a much smaller bias.

Starting from this *Report* we wish to make a change in the method of calculating the real exchange rate index used for the interpretation of monetary conditions. This change is necessitated by the fact that the earlier index was based on a simplifying assumption, i.e. that inflation in the currency zones to which the forint's official central parity was pegged were practically constant or its variance was negligible relative to the Hungarian inflation variance. However, recent inflation developments witnessed in the euro area have led us to abandon this assumption. From this date on, changes in the price of the Hungarian consumer basket will be compared with changes in the price of the euro-area consumer basket taken in forint terms. When calculating foreign prices in forint terms, the fluctuations of the forint's exchange rate within the band will be ignored since it is the relative change in the devaluation rate and inflation that reflects the orientation of monetary policy. This index will only make sense if the domestic and foreign consumer baskets that are being compared are of similar composition. Therefore, it is derived from harmonised consumer price indices, also used for calculating inflation convergence, after making the necessary seasonal adjustments.

**Chart II-3 Two indicators measuring real interest rates**



against the euro and the risk premium demanded by investors. The factors behind the forint's currently low real interest rates are primarily related to the low risk premium and the fact that euro real interest rates continue to be moderate in spite of a series of increases by the ECB. While the ECB's 50-basis-point interest rate hike on June 8<sup>th</sup> placed an upward pressure on Hungarian real interest rates, this effect was offset by the steady decline in the required risk premium.

Chart II-4 Three-month interest rate premium



II-5. ábra Central bank interest rates and short-term market yields

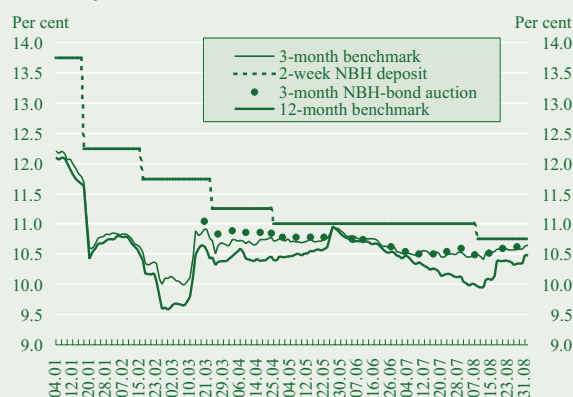
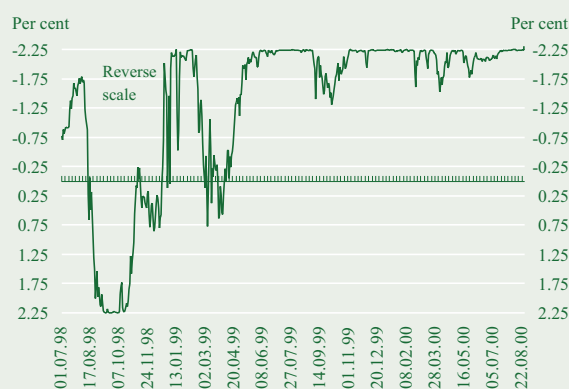


Chart II-6 Intraday position of the forint



While the path of nominal interest rates in the period from March to May was essentially shaped by events in international capital markets and interest rate hikes by foreign central banks, the reasons underlying the resumption of the decline in the interest rate premium and forint yields in June included a better global investor sentiment about emerging economies as well as country-specific factors. Both the fact that the EMBI index, reflecting the perception of risk attached to emerging economies, sank to its lowest values since the Russian crisis, and the publication of favourable Hungarian macroeconomic data in the period between June and August helped to push the three-month interest rate premium below 200 basis points for a short time. The interest in investment opportunities in emerging economies was boosted by weakening expectations of further American interest rate hikes following the Fed's 50-basis-point rise on May 16<sup>th</sup>. Another factor putting a downward pressure on the interest rate premium was the spread of market expectations of a decrease in the rate of devaluation scheduled for October. When these expectations turned out to be unfounded, there was a 20-basis-point upward correction in the three-month interest rate premium (see Chart II-4).

Market yields followed a steady downward trend from June until early August, but this trend seemed to reverse after August. Although monetary policy imported from the European Union tended to put an upward pressure on domestic interest rate levels over this period, this effect was countered by the decrease in the premium. Therefore, the central bank sought to slow the decline in yields via its three-month benchmark auction rates. The rate cut by the central bank on the other main sterilisation instrument, its two-week deposit facility, (by 25 basis points on August 7<sup>th</sup>) served the purpose of changing the relative yields of the NBH bill and the two-week deposit facility as a means of diverting part of the stock of sterilisation instruments from the latter to the former (see Chart II-5).

From the middle of August the level of nominal interest rates began to rise. The unfavourable inflation data in July caused domestic investors to shift their inflation expectations upwards. Despite the rise in nominal rates, the interest rate premium continued to fall, indicating expectations of a further tightening by the ECB on the euro market (there was another 25-basis-point hike in ECB leading rates as of August 31<sup>st</sup>). Despite the declining premium, foreign investors began to show greater enthusiasm for forint investments, triggering another increase in conversion. This period saw a sharp rise in the stock and a shortening of average maturity of foreigners' T-bond holdings, indicating expectations of an appreciation of the forint's exchange rate.

In the period from March to mid-July, the exchange rate of the forint was near the strong edge of the intervention band. The demand for forint conversion, gathering pace in the second half of July due to foreign investors' renewed interest, pushed the exchange rate to the strong edge of the band and made it stay there permanently, apart from a few days in August (see Chart II-6).

Changes in the monetary aggregates reflect diverging tendencies in the saving position of households and the corporate sector. The real growth rate of monetary aggregates continued the downward trend seen in the first quarter, as a combined result of the weaker growth in the household component and lon-

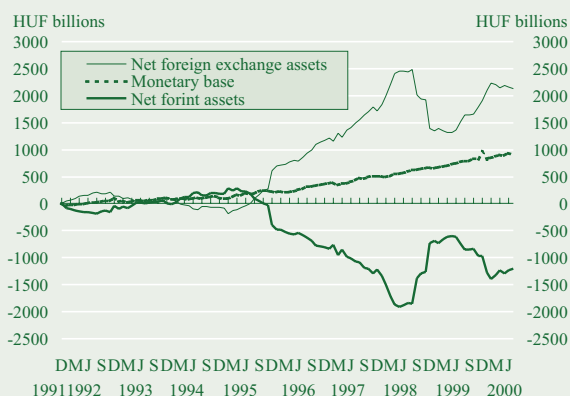
ger-term, strong growth in corporate bank assets. The increase in household consumption continued to outstrip growth in disposable income, also reflected in rapidly rising household borrowing. Lending to households was given another impetus when the margin between the interest rates on consumer loans and deposits stopped growing, along with real interest rates on household borrowing. Lending rates for housing construction and real estate purchases fell significantly as of the second quarter, a change likely to further fuel this type of lending. Corporate demand for loans remained moderate in the second quarter, thanks to good business profitability and the subdued aggregate propensity to invest. Although the proportion of foreign exchange loans in corporate sector financing expanded at a faster pace than earlier, exchange rate risk remained moderate, given that these loans go largely to exporting companies whose income is mainly denominated in foreign currency. It is in the interest of commercial banks as well to engage in foreign currency lending in order to mitigate the exchange rate risk. This way they can narrow the difference between the currency structures of their assets and liabilities against the backdrop of currently low-liquidity forex derivative markets.

### 1.1 Monetary base and demand for forint conversion

2000 Q2 witnessed a slowdown in narrow money growth, down from the first-quarter average of 15.3% to 11.5% in July on a year earlier. The fact that monetary base growth lost momentum is clearly attributable to the slower rise in reserves, which was in line with weaker M3 growth. The amendment to the rules on the reserve requirement, effective as of July 1<sup>st</sup>, is not expected to influence demand for the monetary base, as the effective reserve ratio remained unchanged. According to the new regulation, there is a reserve requirement on 50% of all foreign exchange deposit liabilities with maturities of less than one year, and only 50% of banking sector vault cash can be taken into account when calculating the reserve requirement (see Table II-1 and Chart II-7).

**Chart II-7 Monetary base and its components**

The chart includes cumulated values, 1991 = 0



**Table II-1 Monetary base**  
End-of-period stocks

	2000						HUF billions
	Opening	March	April	May	June	July	
<b>I Monetary base (II+III)</b>	1,439.0	1,373.5	1,398.5	1,383.7	1,420.6	1,417.4	
Non-bank notes and coin	846.2	762.9	785.1	784.3	809.6	819.0	
Other notes and coin	109.7	73.4	75.2	71.0	79.5	76.4	
Reserves	483.1	537.2	538.2	528.4	531.5	5,22.07	
<b>II Net forint assets (b+c+d-a)</b>	101.1	-248.6	-171.8	-225.7	-159.2	-142.9	
a) Sterilisation instruments	619.3	884.2	868.0	846.8	805.7	825.9	
of which: NBH bills	0.0	96.8	204.6	285.5	235.3	270.4	
b) Banking sector loans	120.3	117.1	112.5	109.4	104.5	103.8	
c) Net claims against the government	517.9	443.3	470.5	432.3	454.9	507.1	
Of which: Treasury Account (-)	193.4	267.5	246.8	301.9	250.1	198.0	
Government securities (+)	401.2	393.4	393.5	389.8	378.8	378.8	
Other (+)	310.1	317.4	323.9	344.4	326.2	326.2	
d) Other	82.2	75.2	113.2	79.4	87.0	72.2	
<b>III Net foreign exchange assets</b>	1,337.9	1,622.1	1,570.3	1,609.4	1,579.8	1,560.29	
Net foreign	504.4	700.7	777.6	777.8	736.9	748.8	
Assets	3,269.1	3,476.6	3,592.3	3,607.5	3,435.6	3,503.0	
Liabilities	2,764.7	2,775.9	2,814.7	2,829.7	2,698.7	2,754.2	
Net domestic	833.4	921.4	792.7	831.6	842.9	811.4	
Assets	1,550.4	1,569.9	1,440.1	1,454.4	1,452.4	1,443.0	
Liabilities	717.0	648.5	647.4	622.8	609.5	631.5	

In order to give a more accurate picture of the demand for notes and coins by economic agents, outside the banking system cash and other cash, which is, in effect, vault cash held by the banking sector, have been entered in separate rows in Table II-1. The level of cash outside the banking system expanded at a faster pace than reserves in the first half of 2000, but the 14.5% growth rate seen in the first and second quarters had also dropped to 12.7% by July.

Foreign exchange markets were characterised by a low level of demand for forint conversion from April to July, with the value of conversion merely amounting to HUF 22.6 billion in the second quarter. There was a minor drop in the stock of sterilisation instruments, coupled with a major change in their composition, thanks to the central bank's successful attempt to shift a portion of the funds from the two-week deposit facility into the three-month NBH bills launched in March. This increased the stock of NBH bills to HUF 270 billion in July.

## 1.2 Demand for forint conversion and its components

Demand for forint conversion was at a very low level in 2000 Q2 and abated altogether by June. The corrected current account looked favourable in the period under review, with its deficit more than covered by stronger inflows of direct investment which were even higher than in the first quarter. The low level of demand for conversion was primarily due to the outflow of portfolio capital funds during the quarter, which is unprecedented over the past one and a half years (*see Table II-2*). In addition to the uncertainty on international capital markets in the aftermath of NASDAQ's significant fall, this withdrawal of investment funds is, in all likelihood, also associated with renewed controversy between the Government and the central bank, as well as regulatory measures having a negative impact on the performance of stock market companies. Out of the components of net portfolio investment, equity shares were the hardest hit by the outflow,

Table II-2 Components of demand for forint conversion

	1999 total	2000					Q2
		Q1	April	May	June		
A Conversion	<b>807.6</b>	<b>374.0</b>	12.0	10.6	0.0	<b>22.6</b>	
a) Intervention in inter-bank foreign exchange market	<b>708.4</b>	<b>374.2</b>	9.8	10.6	0.0	<b>20.4</b>	
b) NBH purchases from general government	<b>99.2</b>	<b>-0.2</b>	2.2	0.0	0.0	<b>2.2</b>	
Sources of conversion (I.+ ...+ VIII.)	<b>807.6</b>	<b>374.0</b>	12.0	10.6	0.0	<b>22.6</b>	
I Current account balance corrected with net foreign interest payments (1+2)	<b>-398.5</b>	<b>-75.2</b>	20.8	-29.9	-98.1	<b>-107.3</b>	
1 Current account balance	<b>-497.8</b>	<b>-96.9</b>	7.2	-20.9	-111.5	<b>-125.2</b>	
2 Net foreign interest payments by NBH*	<b>99.3</b>	<b>21.7</b>	13.6	-9.0	13.4	<b>17.9</b>	
II Foreign direct investment	<b>407.5</b>	<b>63.6</b>	60.0	41.9	68.4	<b>170.4</b>	
III Intervention due to commercial banks**	<b>-11.5</b>	<b>33.0</b>	-5.0	-3.3	-7.3	<b>-15.6</b>	
IV Effect of derivatives***	<b>-58.2</b>	<b>75.1</b>	-19.9	-1.7	-20.0	<b>-41.5</b>	
V Intervention due to domestic foreign exchange deposits	<b>-1.6</b>	<b>-7.4</b>	-4.6	-10.3	4.2	<b>-10.8</b>	
VI Net portfolio investments <sup>1</sup> (1.+2.)	<b>303.6</b>	<b>154.0</b>	-34.5	-57.0	11.6	<b>-79.8</b>	
1 Government securities	<b>152.3</b>	<b>142.9</b>	-10.6	-20.6	37.7	<b>6.4</b>	
2 Equity <sup>1</sup>	<b>151.3</b>	<b>11.1</b>	-23.8	-36.4	-26.0	<b>-86.2</b>	
VII Corporate foreign exchange (1.+2.) = (a+b)	<b>237.1</b>	<b>11.0</b>	15.6	40.3	32.3	<b>88.2</b>	
1 Domestic	<b>154.3</b>	<b>77.0</b>	39.0	43.5	38.3	<b>120.8</b>	
2 Foreign	<b>82.7</b>	<b>-66.0</b>	-23.5	-3.2	-6.0	<b>-32.6</b>	
a) Shorter than one year	<b>-73.6</b>	<b>-32.8</b>	-31.4	2.0	19.2	<b>-10.2</b>	
b) In excess of one year	<b>310.7</b>	<b>43.7</b>	47.0	38.3	13.1	<b>98.4</b>	
VIII Capital transfers	<b>8.2</b>	<b>3.8</b>	5.0	5.5	4.0	<b>14.5</b>	
IX Others	<b>321.0</b>	<b>116.1</b>	-25.4	25.1	4.7	<b>4.4</b>	
B Interest rate-sensitive (III.+IV.+V.+VI/1.+VII.)	<b>318.1</b>	<b>254.5</b>	-24.6	4.5	46.9	<b>26.8</b>	
C Speculative (B-V-VII/b)	<b>9.0</b>	<b>218.2</b>	-67.0	-23.5	29.6	<b>-60.9</b>	

<sup>1</sup> In contrast with the June Report, the data in this row correspond to those on the balance of payments. The differences are recorded in the category named Others.

\* Corrected for the net foreign interest payments of the general government.

\*\* Conversion effect of the change in commercial banks' total open position, i.e. the portion of open positions not hedged by derivative transactions.

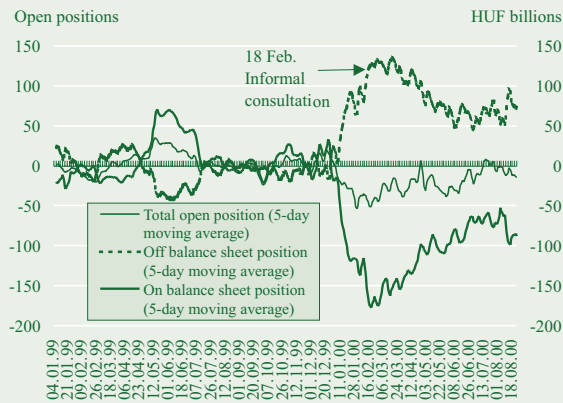
\*\*\* Conversion effect of the change in forward contracts. With these two items the negative sign indicates the closing of long forint positions built up earlier.



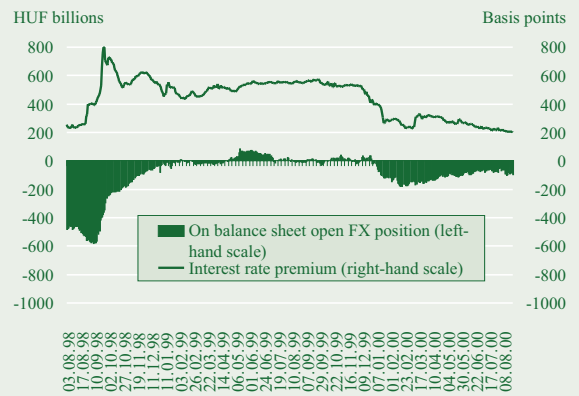
**Box II-2 Foreign exchange market activities of the banking system in 2000 Q3**

The third quarter saw the continuation of second-quarter trends until mid-July, with commercial banks gradually reducing their on-balance-sheet open foreign exchange positions. By mid-July they had also wound up their total open position, enabling them to reduce their forward positions. The turning point came in the middle of July, when the banks resumed building up open positions, at first completely hedged by forward contracts. From early July, there was a rise in both on-balance-sheet and total open positions. The August reopening of on-balance-sheet open positions occurred in the spite of a regulation which came into effect on July 1<sup>st</sup> governing on-balance-sheet open positions (see Box II-1, p. 23. June Report), which increased the cost of speculation in favour of the forint by approximately 70 basis points. The open position came about against the backdrop of a decreasing interest rate premium.

**Chart II-8**



**Chart II-9**



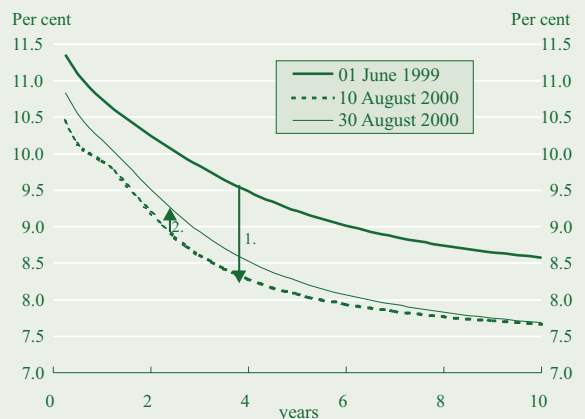
amounting to HUF 86.2 billion, but April and May also saw a decline in net government security investments. In contrast with the first quarter, the change in banks' total open position and their derivative transactions both exerted downward pressure on the level of demand for forint conversion in 2000 Q2 (see Box II-2). As regards corporate sector foreign exchange borrowing, the year so far has seen a strengthening in the tendency of businesses relying on the domestic banking sector for foreign exchange loans, with a parallel decline in the foreign component. In respect of the maturity structure of such borrowing, the predominance of loans with maturities in excess of one year has continued.

**2 Yield curve, interest rate and inflation expectations**

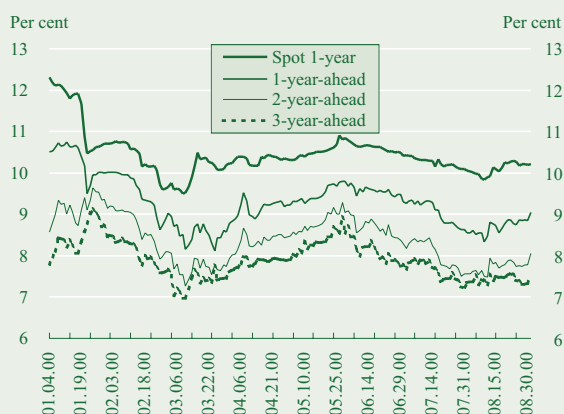
The Bank's June *Inflation Report* tracked the changes in government security yields and the implied market expectations through the end of May. The three months that have passed since then can be divided into two distinct phases: between early June and August 10<sup>th</sup> there was a steady downward shift in the yield curve, with a 60–110 basis-point fall in zero coupon bond yields, varying according to maturity. However, following the publication of the July inflation data (on August 11<sup>th</sup>), there was a turning point, slightly reversing the trend (by 30–40 basis points) in the section of the yield curve with maturities shorter than three years (see Chart II-10).

The June Report contained a detailed analysis of the steady rise in forint yields seen between early March and May. It was indicated that external factors also contributed to the success of the

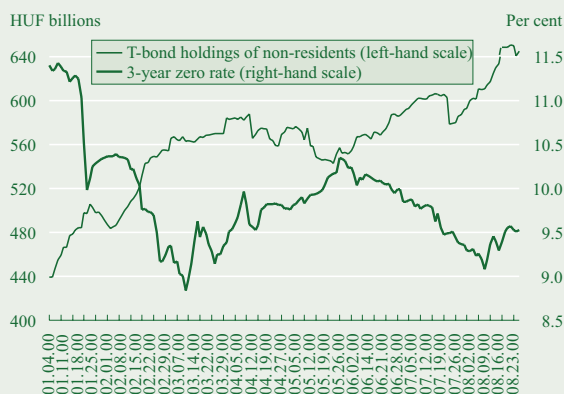
**Chart II-10 Zero coupon bond yield curves**



**Chart II-11 One-year spot rate and one-year implied forward rates in one, two and three years' time**

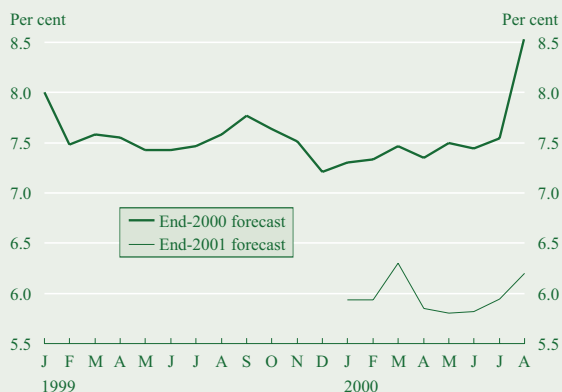


**Chart II-12 Government security holdings of foreign residents as registered by KELER and the three-year zero coupon rate**



**Chart II-13 Reuters survey of macro analysts' inflation expectations**

Year-on-year CPI inflation in December



central bank's efforts (including the launch of a new three-month NBH bill) to stabilise the level of Hungarian real interest rates. Such factors included the rise in short-term euro and dollar interest rates and the increased uncertainty about emerging markets in the aftermath of the March events in the US capital markets (higher required risk premiums).

The question arises as to what triggered the turnaround in early June, when the steady downward trend in nominal yields commenced (see Chart II-11).

This time the underlying factor does not seem to be related to changes in euro yields, considering that the ECB raised short-term leading rates by 50 basis points as of June 8<sup>th</sup>. Even with market analysts' unanimous expectations of an increase, its actual size came as somewhat of a surprise. Although interest rates on the anchor currency had increased, a probable drop in the required risk premium had the opposite impact on the level of Hungarian interest rates. The significant decline in emerging market bond spreads since the beginning of June is a sign of improved global investor sentiment about these countries.

A number of favourable Hungarian macroeconomic indicators published in early June also put a downward pressure on forint interest rates. The robust preliminary estimate for first-quarter GDP growth of 6.8%, published by the Central Statistical Office on June 1<sup>st</sup>, considerably exceeded market expectations. The bond market clearly benefited from the news, thanks to the fact that the underlying cause for growth was buoyant net exports, which did not pose a threat of inflationary pressure generated by stronger domestic demand. Preliminary figures on the April current account deficit on the balance of payments, (a surplus of EUR 20 million instead of market analysts' average forecast of a EUR 112 million deficit), published on June 5<sup>th</sup>, triggered a similar response.

Improvement in the international perception of emerging markets and the favourable country-specific macroeconomic indicators were likely to have *reduced the required risk premium on the forint, more than offsetting the impact of the rise in euro interest rates, causing yields on forint-denominated investments to fall*. As a palpable sign of the drop in the required risk premium, there was considerable increase (by about HUF 100 billion) in the stock of foreigners' forint-denominated government security holdings over June and August (see Chart II-12).<sup>1</sup>

May and June CPI inflation, published in June and July, respectively, were in line with expectations, causing no major changes in market participants' inflation expectations: thus the reason for the drop in yields must be sought elsewhere. Nevertheless, the announcement of the July CPI inflation on August 11<sup>th</sup> brought a turning point as the 9.6% price index considerably outstripped analysts' average forecast (of 8.7%). Response from the bond market came immediately, on the very day of the announcement of the unfavourable data, with benchmark yields moving up by 12–36 basis points, depending on maturity. This increase proved to be persistent and reflects a rise, mainly in me-

<sup>1</sup> The increase in foreign residents' government security holdings was temporarily interrupted when the 2000/J bond matured on July 24<sup>th</sup>. This was because foreigners had held a considerable amount of this bond (worth some HUF 32 billion). However, as the redeemed amount was reinvested in forint-denominated bonds about a week later, foreigners' bond holdings resumed increasing at the earlier rate by August.

dium-term, inflation expectations. By the end of August, the zero coupon yield curve up to the 3-year maturity showed a 30–40-basis-point upward shift relative to the period prior to the announcement, while longer yields increased to a smaller extent. The regular survey of market analysts by Reuters also reflected the increase in inflation expectations for end-2000 and 2001. Responses to this survey on August 23<sup>rd</sup> showed a one-percentage-point upward shift in expectations, from 7.54% in July to 8.55%.<sup>2</sup> Average inflation forecast for late 2001 only changed to a smaller extent, from 5.95% in July to 6.20% (see Chart II-13).

The assumption that the underlying factor for the August rise in returns was the upward adjustment in inflation expectations is also supported by the apparent increase in foreigners' government bond holdings, less vulnerable to forint inflation, continuing at an unbroken pace even after the unfavourable figure was announced. It should be noted that since early June the average maturity of foreigners' government security holdings has shortened to some extent. Foreigners' growing interest in short-term securities may also reflect expectations of a decrease in the rate of devaluation or an appreciation of the forint in the near future.

As the rate of interest on the three-month NBH bill was set by the central bank with a view to stabilising short-term market yields, its interest rate decreased to a much smaller extent than the yields on market instruments of similar maturity. The stable 10.78% average yields on the bills auctioned in May fell to 10.64% by early July. Hence, the relative yield on the two-week deposit facility had to be reduced as well soon, in order to prevent an excessive rise in the share of the two-week deposit facility within the stock of central bank instruments (the stock of the two-week deposit instrument was expanding at a fast pace during the first half of July). The cut in the rate of interest on this instrument from 11% to 10.75% was announced by the National Bank on August 7<sup>th</sup>. On the same day there was an auction of three-month bills, resulting in a drop in the average yield to 10.59%, despite the central bank's effort to keep the rate of interest high by accepting all bids. After the increase in market yields following the publication of the higher-than-expected July inflation rate, the central bank followed suit with the rate on three-month bills, although to a much more moderate extent. The last auction in August brought the average yield up to 10.68%.

### 3 Interest rate policy of commercial banks

The second quarter of 2000 saw only a slight fall in commercial bank deposit and lending rates, consistent with the relative stability of market yields and banks' efforts to smooth interest rates (see Chart II-14). The spread between short-term market yields, corporate deposit rates and short-term corporate borrowing rates returned to the equilibrium rate of approximately 1.5 percentage points, a spread commercial banks have sought to maintain for the past three years (see Charts II-15 and II-16).

<sup>2</sup> Average forecast is calculated with the "trimmed" mean, which is constructed with the omission of the smallest and largest individual forecasts, therefore it may differ from the average published by Reuters.

Chart II-14 Commercial bank rates and market yields

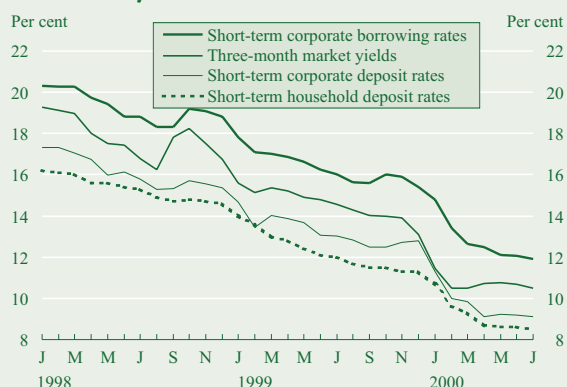


Chart II-15 Short-term corporate borrowing rates and three-month market yields

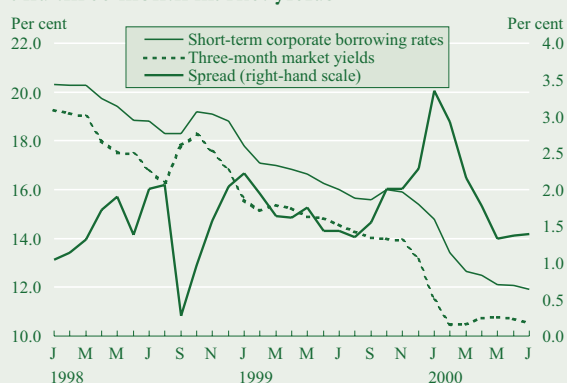


Chart II-16 Short-term corporate deposit rates and three-month market yields

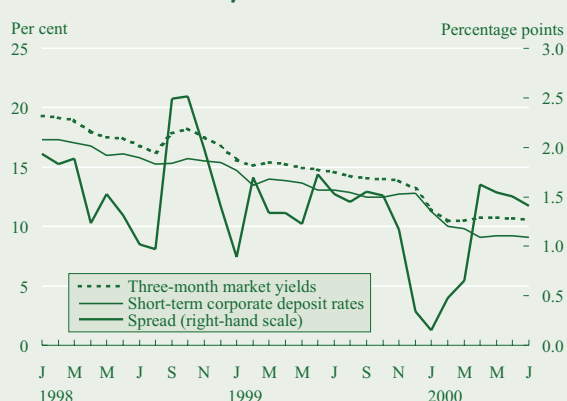
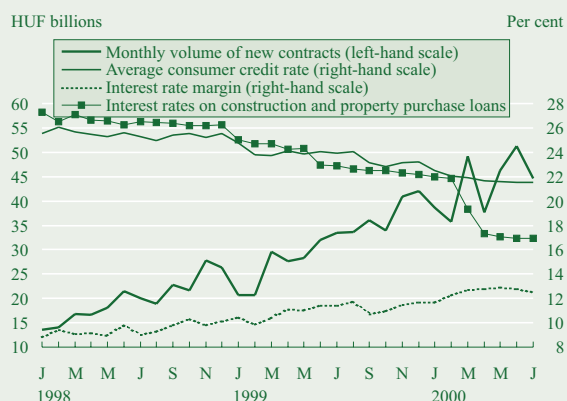
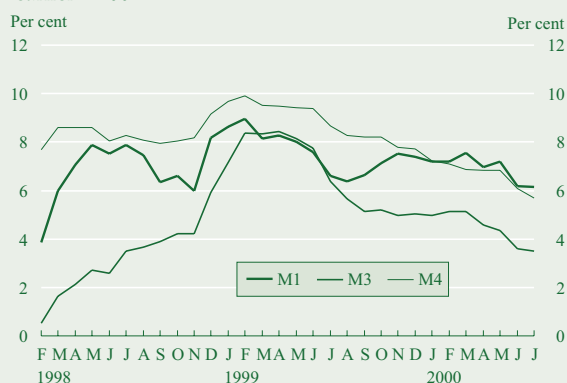


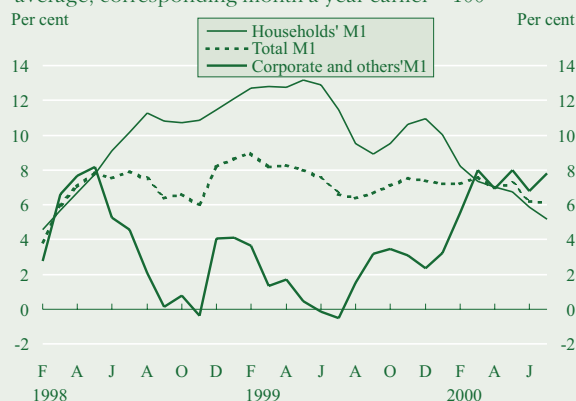
Chart II-17 Lending to households



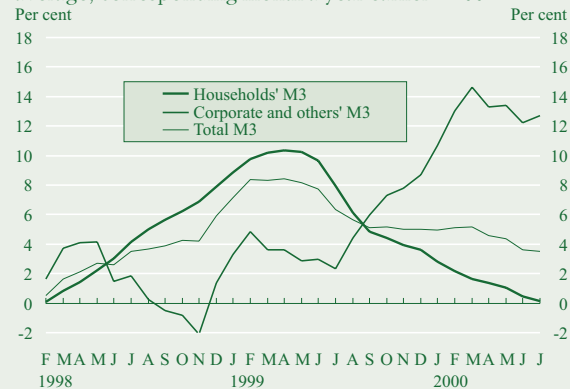
**Chart II-18 Real growth rate of monetary aggregates**  
Three-month moving average, corresponding month a year earlier = 100



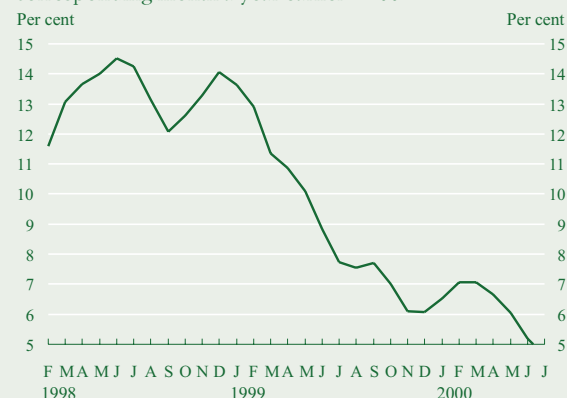
**Chart II-19 Real growth rate of M1** Three-month moving average, corresponding month a year earlier = 100



**Chart II-20 Real growth rate of M3** Three-month moving average, corresponding month a year earlier = 100



**Chart II-21 Real growth rate of households' net financial wealth** Three-month moving average, corresponding month a year earlier = 100



Lending to households continued along recent lines, with robust growth in consumer credit. The value of new consumer loans extended in June amounted to as much as HUF 50 billion, composed predominantly of credit maturing in 6–12 months or in excess of one year. In contrast to the previous period, the increase in the margin between consumer credit rates and deposit rates was interrupted during the second quarter, together with an increase in real consumer credit rates, which, however, still remained rather high (see Chart II-17). Interest rates on market-based (non-preferential) loans for residential construction and property purchases dropped by nearly 5 percentage points in the period between March and July. This was primarily due to the fact that competition triggered by the launch of subsidised and preferential housing loans forced banks to cut their rates as well.

## 4 Monetary aggregates

The real growth rate of monetary aggregates dropped between April and July 2000 (see Chart II-18). The reason for the decrease is the slowdown in the growth rate of the household components of real aggregates, relative to the preceding period, while growth in components held by companies and other participants stabilised at the earlier rate (see Chart II-19 and II-20).

The behaviour of the household components of monetary aggregates is associated with changes in households' net wealth and portfolio preferences. While in the previous quarter growth in monetary aggregates was predominantly influenced by households' attempts to rearrange their portfolios, the factor behind the weaker second-quarter growth is the slowdown in households' net wealth growth in real terms, with the weight of assets held within the banking system remaining unchanged (see Chart II-21).

Within monetary aggregates held outside the household sector, real M3 growth was exceptionally vigorous, thanks to the corporate sector's high profitability and strong cash flow. At the same time, companies have tended to place their revenues not in liquid facilities, but rather in time deposits, marking a shift from previous preferences. The implication is that the banking sector is offering new investment facilities not only to households, but also the corporate sector.

Households' transactional demand for money is measured by the velocity of circulation. Both indices constructed by the National Bank show velocity to have slowed slightly, a sign of stronger transactional money demand (see Chart II-22).

## 5 Demand for corporate credit

The corporate sector's net position was favourable in the second quarter, with only a moderate need for external financing, thanks to good business profitability, based on robust domestic and external demand, as well as low investing propensity for the corporate sector as a whole. At the same time, the simultaneously fast growth in assets and liabilities may still imply that the implementation of investment projects is confined to one segment of the corporate sector, with the rest of the corporate sector still experiencing an accumulation in non-invested assets.

There was a significant shift in the structure of corporate liabilities, with the weight of foreign exchange financing expanding at a faster pace than previously. Companies' net forint position became more balanced, as growth in the volume of forint-denominated deposits and government security holdings was faster than forint borrowing (see Chart II-23). Domestic borrowing was dominated by loans denominated in foreign exchange, mostly in euro, with a simultaneous rise in the weight of direct borrowing from abroad, which was, however, outstripped by fast growth in the level of foreign assets, probably thanks to a pick-up in exports, reducing the sector's net foreign debt. The maturity structure of forint-denominated and foreign-currency-denominated loans developed in opposite directions, with the former dominated by short-term loans and the latter by loans with maturities in excess of one year.

This restructuring in corporate borrowing patterns could lead to an increase in exchange rate risk. This effect, however, is significantly mitigated by the fact that the bulk of concentrated foreign exchange loans are extended to exporting companies, which are expanding at a faster rate than the sector as a whole. A large chunk of the recent increase in foreign-exchange loans involved manufacturing and mechanical engineering companies, earning most of their income in foreign currency terms, especially in euro. Another factor reducing risk is that, in respect of largely foreign-currency loans taken out to finance property development projects, most of the incomes from rental are also denominated in foreign currency, notably in German mark. The exchange rate risk incurred by these companies is reduced by borrowing in foreign exchange, which also coincides with the interest of commercial banks, which, due to the severe lack of forint funds, are also obliged to rely on foreign exchange funds (see Chart II-24). Given the low liquidity of forex derivatives market since 1998, managing the exchange rate risk requires a closer alignment of the structure of assets and liabilities, which, in turn, implies lending in foreign currency terms. However, such a shift would not be without some risk to the banking sector, as it results in transferring risk management to the corporate sector, which generates credit risk for banks with respect to enterprises unhedged against exchange rate risks.

Chart II-22 Velocity of M1  
1997 Q1 = 1

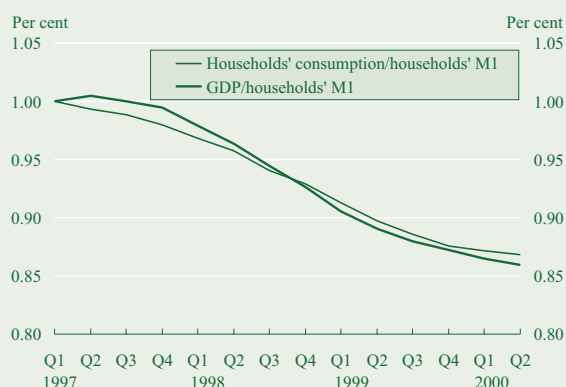


Chart II-23 Net forint and foreign currency position of the corporate sector as a percentage of GDP

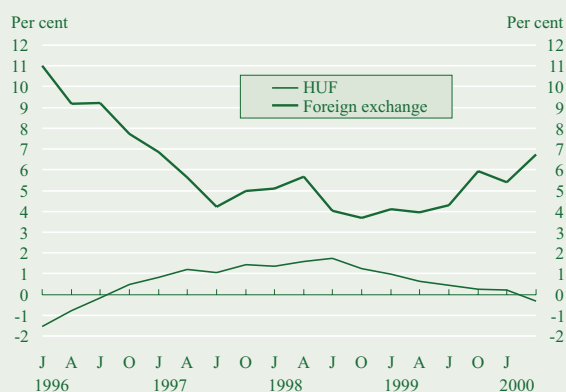
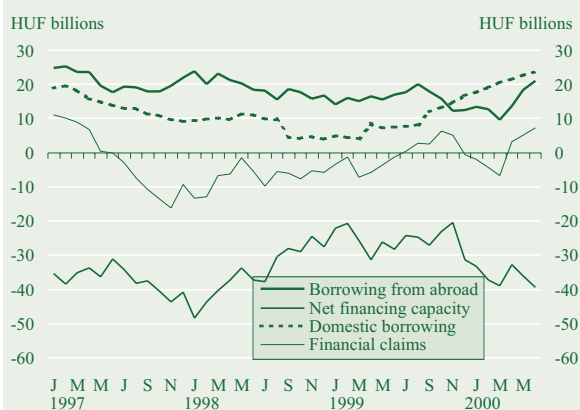
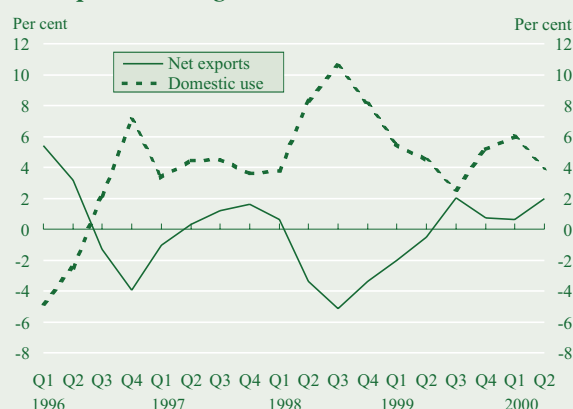


Chart II-24 Structure of the operational net financing requirement of the non-bank corporate sector  
Seasonally adjusted data, at 1995 average prices



## III. Demand

**Chart III-1 Contribution of domestic absorption and net exports to GDP growth**



**Table III-1 Annual growth rate of GDP and its components\***

Percentage changes on a year earlier

	1999					2000	
	Q1	Q2	Q3	Q4	Total	Q1	Q2
	Preliminary figures published by Central Statistical Office						NBH estimates
Final consumption	4.6	4.4	4.3	3.8	4.3	3.0	3.5
Household consumption	4.5	5.0	4.5	4.4	4.6	3.3	3.7
Public consumption	4.6	1.4	2.8	0.1	2.2	0.9	2.6
Gross capital formation**	7.6	4.0	-1.6	7.6	4.3	12.8	4.5
Fixed capital formation	6.4	6.8	4.2	8.1	6.6	7.0	5.5
Total domestic absorption	5.4	4.3	2.4	5.0	4.3	5.7	3.8
Exports	9.5	9.8	13.6	18.9	13.2	20.8	20.6
Imports	12.9	10.2	9.3	16.6	12.3	18.3	16.2
GDP	3.5	3.9	4.5	5.9	4.5	6.6	5.9

\* The Bank's quarterly GDP estimates are based on the quarterly GDP data published in April 2000 by the Central Statistical Office on the period 1995–1999. The estimates are consistent with the Bank analyses describing the income positions of individual income holders.

\*\* Includes the statistical discrepancy, represented by the difference between the results of calculations for production and absorption.

**Table III-2 Contribution to GDP growth by individual items of absorption**

Percentage changes on a year earlier

	1999					2000	
	Q1	Q2	Q3	Q4	Total	Q2	Q2
	Preliminary figures published by Central Statistical Office						NBH estimates
Final consumption	3.4	3.1	3.0	2.7	3.0	2.3	2.5
Private consumption	2.9	3.0	2.7	2.7	2.8	2.2	2.3
Public consumption	0.5	0.1	0.3	0.0	0.2	0.1	0.2
Gross capital formation*	2.1	1.3	-0.5	2.5	1.4	3.7	1.4
Fixed capital formation	0.9	1.4	1.1	2.8	1.6	1.0	1.2
Total domestic absorption	5.5	4.4	2.5	5.2	4.4	6.0	3.9
Exports	5.0	5.2	7.3	10.1	7.0	11.4	11.6
Imports	-7.0	-5.7	-5.3	-9.4	-6.9	-10.8	-9.6
Net exports	-2.0	-0.5	2.0	0.7	-0.1	0.6	2.0
GDP	3.5	3.9	4.5	5.9	4.5	6.6	5.9

\* Includes the statistical discrepancy represented by the difference between the results of calculations for production and absorption.

Robust economic growth continued to characterise the Hungarian economy in 2000 Q2. Compared with the 6.6% rate in the first quarter, year-on-year GDP growth amounted to 5.9% in the second quarter. The driving force behind the expansion of gross domestic product continued to be the rapid growth in external demand, accompanied by a slowdown in the growth rate of domestic absorption. The subdued rise in domestic demand put downward pressure on the increase in import demand as well.

The export volume recorded within the structure of the national accounts increased at a faster rate (21%) than the import volume (16%), simultaneously with a further deterioration in the terms of trade (by nearly 3 percentage points). Thus, net exports according to the national accounts made a greater contribution (2 percentage points) to the expansion of value added than in the previous two quarters, parallel with the decline in the contribution of domestic absorption (see Chart III-1).

Of the components of domestic absorption, consumption played a slightly more pronounced role in the expansion of GDP in 2000 Q2. The volume of second quarter household consumption was up by 3.7% on a year earlier against the backdrop of a 1.6% rise in disposable income (see Table III-1). Thus, consumption continued to grow at a faster rate than operational income, as is also reflected in the moderate saving rate.

Just as in the previous three months, the second quarter was characterised by a moderate rise in investment spending, despite the pick-up in external sales opportunities, expanding domestic demand and the favourable financial position of businesses. Investment activity gained some momentum in manufacturing (accounting for about one-fourth of total investment). This sector has a relatively high level of average capacity utilisation, and the proportion of firms reporting capacity shortages relative to prospective orders is rising. As far as the services sector is concerned, investment activity was generally weak during the second quarter, with the exception of real estate activities and business activities (which saw a substantial 18% rise in volume over a year earlier, due in all likelihood to the pick-up in new home construction). The year-on-year rise in whole-economy fixed capital formation amounted to a total of 5.5% in the second quarter.

Stockbuilding, the other major capital formation item, along with other unspecified components of absorption, continued to make a positive contribution to GDP growth, although at a much lower rate than in the first quarter (see Table III-2). The level of industrial output stocks, which account for some one-fourth of total inventories, rose at a slower pace in quarter-on-quarter com-

parison, while the volume of intermediate goods sold on the domestic market rose at an even higher rate of 14%, presumably accompanied with a rise in the level of input stocks in addition to faster production growth.<sup>1</sup> The exceptional rise in intermediate goods imports is another sign of rising levels of input stocks.

## 1 Household consumption

Household consumption in 2000 Q2 continued to follow a growing trend, outstripping income growth, which led to a drop in savings rates. As nominal income growth only followed the slowdown in disinflation to a limited extent, total real income expanded by roughly 1.7% (see Table III-3).<sup>2</sup> The key factor in overall income growth continued to be net earnings growth (4.3% in 2000 Q2). It was primarily the volume of benefits in kind and cash that were modified by slower disinflation, reducing the latter by nearly 1% in real terms and increasing the former by 0.5% in volume terms, relative to the previous quarter.

The difference between the growth rates of total income and operational income – i.e. adjusted for the portion of interest income compensating for inflation – decreased in 2000 Q2 (see Table III-3).

The fact that consumption growth outstripped operational income growth was due to households smoothing their consumption (see Chart III-2).

The rosy picture of the future created in people's minds as a result of the rise in employment and real incomes achieved by several years of robust economic growth is likely to result in lower security saving efforts. Accordingly, consumer spending is the fastest growing item within disposable income growth, but a number of government measures are also expected to boost housing investment spending.

In 2000 Q2, consumption increased by 3.7% and operational income by 1.6%. Although both categories increased at a higher rate than in the previous quarter, they fell short of the rate for the same period a year ago by 1.3 and 2.1 percentage points respectively, thus slightly reducing the difference between the two growth rates.

Consumption growing faster than income brought the second-quarter gross saving rate<sup>3</sup> down to 9.9% from 11.4% a year earlier. The 2.5% operational financial saving rate was 0.9 percentage points down on the previous year, while the 6.9% investment rate was 0.6 percentage points lower in a year-on-year comparison (see Chart III-3).

Housing construction, the largest item within investment, was partly boosted by subsidised loan facilities launched during the

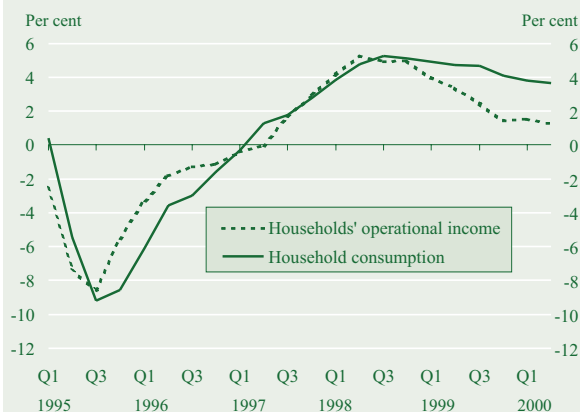
**Table III-3 Annual growth of household income and consumption in real terms\***  
Percentage change on a year earlier

	1998	1999	2000	
			Q1	Q2
Total income	4.0	2.2	1.0	1.7
Operational income	4.6	2.9	0.7	1.6
Volume of consumption	4.8	4.6	3.3	3.7

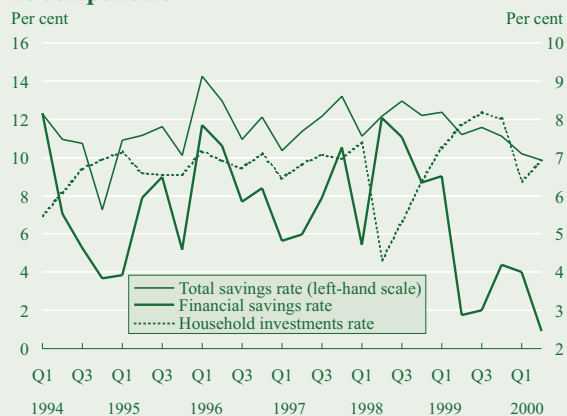
\* The figures for 1999 income growth in the June Report have been revised according to the data from the final fiscal accounts completed since then, on the basis of which social security contributions are estimated to have been HUF 25 billion higher and social benefits in kind lower by the same amount.

**Chart III-2 Real growth rate of household consumption and operational income**

Percentage changes on a year earlier;  
three-term moving average



**Chart III-3 Changes in the household saving rate and its components\***

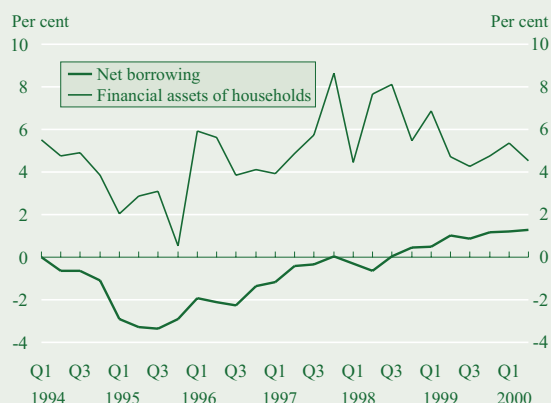


\* Seasonally adjusted data as a percentage of operational disposable income.

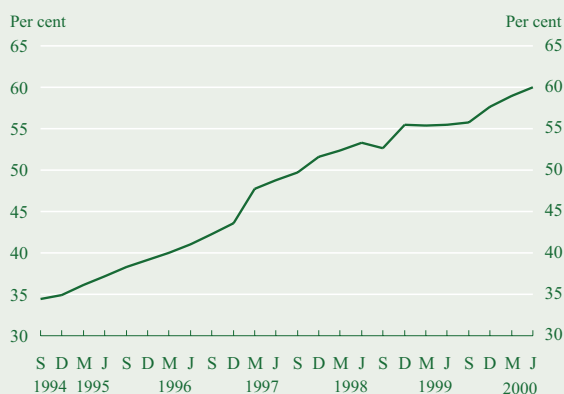
<sup>1</sup> Based on industrial statistics.

<sup>2</sup> The reason for the revision of income data is the entry of the household income estimate for 1998 and quarterly GDP data published by the Central Statistical Office.

<sup>3</sup> All saving rates mentioned in this section are operational categories and seasonally adjusted.

**Chart III-4 Net household borrowing and financial assets\***

\*Seasonally adjusted data as a percentage of operational disposable income.

**Chart III-5 Households' net financial wealth as a percentage of trend disposable income**

course of the year, as well as the protracted impact of home building projects put on hold because of VAT refunds promised in 1998. Home building investment as a proportion of operational income stood at 5.6% in 2000 Q2, compared with 4.7% a year earlier.

Within the financial savings category, deposits with banks were somewhat unpopular, due to the low real interest rates, bringing down the inflation-adjusted value of forint deposits and bank securities by nearly HUF 28 billion. There was no significant rise in either the stock of investment trusts or government securities, the former rising by HUF 3 billion in operational terms and the latter by HUF 0.7 billion. Households' financial assets were dominated by operational rises in stock market share holdings and pension fund contributions amounting to HUF 13 billion and HUF 24 billion, respectively.

The second-quarter drop in the financial saving rate was also reflected in the HUF 24 billion increase in households' inflation-adjusted borrowing (see Chart III-4). Against the backdrop of favourable macroeconomic prospects, the decrease in the saving rate, due to a shift in households' consumption and saving habits, may be regarded as a natural development. Nevertheless, a change of this type will necessitate the rethinking of the economic policy framework (see Chart III-5).

## 2 Investment

In 2000 Q2, whole-economy investment expanded by 5.5% year on year in real terms - a slowdown compared with the investment activity seen in the previous quarters (8.1% in 1999 Q4, 7.0% in 2000 Q1).

As in the previous quarter, the favourable cyclical position abroad and the rise in orders would have justified stronger investment activity in the second quarter as well. Additionally, data on industrial output and trade in domestic investment goods supported positive expectations, together with business survey results.<sup>4</sup> Likewise, seasonally adjusted data on the level of capacities suggested a higher rate of investment, with a high level of capacity utilisation, equal, in fact, to the approximately 80% rate in 1998 H1, and the number of firms reporting a shortage of capacities also increased. However, forecasts based on imports of investment goods suggested weaker investment growth.

By sectoral breakdown, the low investment activity of sectors producing material goods was conspicuous (see Table III-4). Although the growth rate of 6% for manufacturing investment exceeded the rate for the previous quarter by 3.5 percentage points on a year-on-year basis, it still fell significantly short of the rates seen over the past few years even though cyclical conditions were similarly benign. Agricultural investment at current prices essentially remained steady, with the same tendency seen in mining as well. The 6.6% performance of the construction indus-

<sup>4</sup> Note that most surveys also showed that companies had scheduled investment expenditures for the second half of the year.



try seems low compared with the 12% rate recorded last year, although the impact of the high base in 1999 should be taken into account.

As far as material services are concerned, there were no signs of strong investment activity, except in the property business. Neither the hotel nor the transport sector was able to reproduce the exceptionally strong rates of the first quarter (down to 3.3 and 6%, respectively, from 14.6 and 36.7% in Q1). Weak growth in the transport sector is partly attributable to the delay in motorway construction, the effect of which is only expected to appear in the second half of the year. Investment in financial services also remained subdued, entailing a steady decline in volume terms on a year-on-year basis since 1999 Q1.

Investment related to property transactions is likely to have been given impetus by the pick-up in home building projects. The rising number of building permits issued since early 1999 suggests that a considerable number of dwellings were under construction in the summer of 2000. Although this is not yet reflected in the number of completed houses and flats, it is likely to push up the investment rate. Second-quarter data indicate a steady rise in the number of building permits, exerting upward pressure on housing-related borrowing, together with expectations of a further pick-up in the sector.

Investment activity in non-material services showed a rather varied picture, but on the whole was down considerably on the previous quarter (from 17% in Q1 to 4.5%). Educational and health sector investment remained virtually unchanged in volume terms, indicating languid investment by local authorities in contrast to the first quarter.

The material and technical composition of investment indicates that the trend of construction projects falling short of machinery investment in volume terms is continuing (3.8 and 8.5% in Q2). This is in line with the somewhat low rate of production and investment growth in the construction industry. Nevertheless, the current upswing in home building and the launch of the motorway construction is likely to shift the ratio slightly in favour of construction investment.

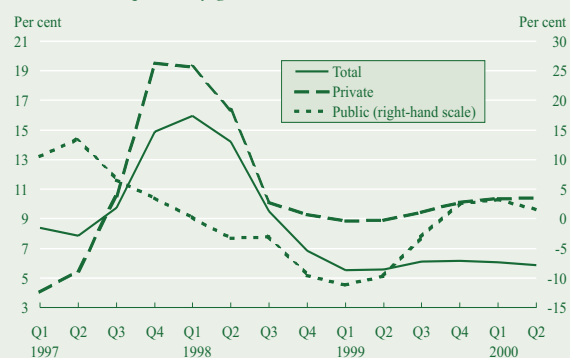
In terms of investment with respect to income holders, public sector activity appears to be at an exceptionally low rate relative to the previous quarter, putting strong downward pressure on the seasonally adjusted series (see Chart III-6). Central budget projects grew at a relatively rapid pace, while local governments displayed weak activity, especially compared with the first quarter. It seems to be still a valid statement that since economic policy decisions cause public sector investment to be highly volatile across the year, it is more expedient to consider the year as a whole.

Currently available information indicates that the volume of public sector investment is likely to increase at a roughly 10% rate for the year as a whole, thanks largely to stronger investment on the part of local authorities.

In respect of private sector investment, second-quarter year-on-year indices reflected an approximately 8% rate of growth, higher than in the previous quarter, which, however, represents no effective change in terms of seasonally adjusted quarterly growth rates. Households' investment expenditure continued to remain flat against the background of more dynamic corporate investment growth.

Table III-4 Whole-economy investment growth rates

	Distribution in 1999 (%)	1999 Year	2000	
			Q1	Q2
Agriculture, hunting and forestry, fishing	3.29	-3.3	-15.7	-14.9
Mining	0.42	49.6	-17.4	-24.1
Manufacturing	26.08	7.7	2.3	5.9
Electricity, gas, steam and water supply	6.95	3.8	-4.7	-9.7
Construction	1.95	12.1	5.3	6.6
<i>Material production, total:</i>	<i>38.68</i>	<i>6.5</i>	<i>-0.1</i>	<i>1.1</i>
Wholesale and retail trade, repair of motor vehicles, motorcycles, personal and household goods	7.55	13.2	5.2	7.3
Hotels and restaurants	1.08	15.7	14.6	3.3
Transport, storage, postal services and communication	17.93	1.9	36.7	6.0
Financial intermediation	2.83	-9.5	-7.9	-6.9
Real estate, renting, business activities and housing investment	19.16	11.6	-0.8	18.3
<i>Material services, total:</i>	<i>48.55</i>	<i>6.7</i>	<i>12.2</i>	<i>10.0</i>
<i>Material production + material services, total:</i>	<i>87.23</i>	<i>6.6</i>	<i>6.2</i>	<i>5.7</i>
Public administration and defence, compulsory social security	4.28	27.0	47.9	5.5
Education	2.03	15.9	15.8	2.1
Health and social work	2.13	-9.9	16.3	-1.0
Other community, social and personal services activities	4.33	-4.3	-11.6	7.1
<i>Non-material services, total:</i>	<i>12.76</i>	<i>6.3</i>	<i>17.6</i>	<i>4.5</i>
<b>Total</b>	<b>100.00</b>	<b>6.6</b>	<b>7.0</b>	<b>5.5</b>

Chart III-6 Changes in fixed investment  
Annualised quarterly growth rates

### 3 The fiscal stance

The SNA-based primary balance improved by 2.5% of GDP relative to 1999 Q2, thus the general government restricted demand to this extent. Adjusting for the adverse effect of the base period,<sup>5</sup> the size of the tightening of demand in the first six months would roughly equal 1.6% of GDP, much better than the 0.5% rate projected for the year as a whole (see Table III-5). The 2.5% improvement on the primary balance was predominantly due to temporary factors. The timing of receipts from taxation seems to have followed the pattern seen in 1998, a year with more favourable seasonality than 1999, with some of the quarterly data being even better. At the same time, expenditures displayed a different seasonality than last year, with certain items being even better than those in 1998.

1. In 2000 Q2, spending on housing subsidies remained subdued, as did investment expenditures by the budgetary sector. The State Privatisation and Holding Company also made a considerable cut in spending in the second quarter, relative to the same quarters of the previous two years. This year's measure of extending entitlement to housing subsidies may cause the increase in related expenditures to considerably exceed the normal level of seasonality.

2. Slower-than-expected disinflation is improving receipts from taxation, from VAT in particular, while effects causing a deterioration in the balance are expected to emerge in the fourth quarter, due to pension payments being raised retroactively (similar to 1998, when there were retroactive supplementary payments).

3. VAT receipts seem to have followed an unusual pattern. This was partly because of the exceptionally low values in the base period in 1999, due to a one-off low in receipts at that time. In addition, the distribution of receipts over 2000 Q1 and Q2 differed from that seen over the previous few years. The effect of these two factors can be removed by comparing 2000 H1 to 1998 H1 and calculating average growth rates for 1999 and 2000. The resulting figures also indicate that the components of the VAT balance for 1999 diverged from the normal growth path observed in the preceding period in terms of quarterly aggregates (see Table III-6). The calculations indicate that the average first-half growth index of net VAT receipts between the first halves of 1998 and 2000 was 4.2% as the average of two years, in-

Table III-5 General government deficit as a percentage of GDP

	Per cent					
	1998	1999			2000	
	H1	Q1	Q2	Preliminary	Q1	Q2
<b>1 Central budget balance excluding privatisation</b>	<b>-4.3</b>	<b>-9.0</b>	<b>-2.5</b>	<b>-2.9</b>	<b>-4.3</b>	<b>-1.1</b>
2 Primary balance (excluding NBH)	2.7	1.0	3.0	3.6	3.0	4.2
3 Interest balance	-8.2	-9.7	-6.3	-6.7	-7.4	-5.5
4 NBH profits and losses	1.2	-0.3	0.8	0.2	0.2	0.2
5 Balance of segregated funds excl. privatisation	0.4	-0.9	-0.1	-0.4	0.1	-0.1
6 Balance of Social Security funds excl. privatisation	-1.2	-2.2	-1.1	-1.1	-0.8	-0.4
7 Balance of local governments excl. privatisation	0.2	2.1	-1.2	0.0	1.3	-0.8
8 Primary balance of local governments	0.0	1.9	-1.4	-0.2	1.1	-0.9
<b>9 General government balance excluding privatisation</b>	<b>-4.9</b>	<b>-10.1</b>	<b>-5.0</b>	<b>-4.4</b>	<b>-3.6</b>	<b>-2.3</b>
10 Out of this: primary balance	1.9	-0.2	0.3	2.0	3.5	2.8
<b>11 Accrual-based deficit of general government</b>	<b>-4.6</b>	<b>-8.2</b>	<b>-5.8</b>	<b>-4.7</b>	<b>-4.8</b>	<b>-2.8</b>
12 Accrual-based primary balance	1.9	-1.1	0.4	1.7	2.3	2.3
13 Deficit correction by financial transactions	-1.0	0.2	-0.1	-0.1	-0.2	-0.3
14 Deficit of Privatisation and State Holding Company	-1.1	-0.3	-0.5	-0.8	-0.8	0.1
<b>15 SNA financing requirement (15=11+13+14)</b>	<b>-6.6</b>	<b>-8.3</b>	<b>-6.4</b>	<b>-5.5</b>	<b>-5.8</b>	<b>-3.0</b>
<b>16 SNA primary balance (16=12+13+14)</b>	<b>-0.1</b>	<b>-1.1</b>	<b>-0.2</b>	<b>0.8</b>	<b>1.1</b>	<b>2.1</b>
17 Effect of the pension reform	0.2	0.5	0.5	0.5	0.5	0.5
<b>18 Demand effect (changes in lines 16 and 17)</b>	<b>0.0</b>	<b>1.2</b>	<b>-0.4</b>	<b>-0.5</b>	<b>-2.3</b>	<b>-2.5</b>

<sup>5</sup> In 1999 H1, the balance deteriorated due to a number of extraordinary items, concentrating a disproportionately large portion of the annual deficit over the first six months. Thus, although the government expanded aggregate demand by 0.3% of GDP in 1999 H1, for the year as a whole demand was restricted by 0.5% of GDP, thanks to the considerable tightening implemented over the second six months. This effect can be removed by taking 1998 H1 as the base period since the sub-annual pattern of expenditures and receipts in 2000 compare much more closely to those in 1998 than in 1999. Thus, over the course of two years, the government tightened demand by 2.1% of GDP altogether (the 0.3% expansion being followed by a 2.4% tightening). Deducting from this the annual fiscal effect for 1999 (-0.5%) gives the rate of tightening as 1.6% for the first half of 2000.

cluding a 4.8% index for domestic VAT contributions and 5.5% for VAT refunds.

The trend in VAT payments was in line with the macroeconomic developments of the past two years. The increase in domestic VAT payments also followed the growth rate of domestic purchased consumption.

The decline in cash benefits to households in real terms was due to two factors. First, slower-than-expected disinflation reduced the real value of transfer payments, well illustrated by the drop in the real value of pensions in the second quarter, when disinflation gathered pace relative to the previous quarter, slowing the rate at which pensions were losing their value in real terms. Under the provisions of the Pension Act, there will be a retroactive supplementary payment of pensions in the fourth quarter, based on the Swiss indexation method, which is expected to make the loss in the real value of pensions only a temporary effect. The fact that in 1999 pensions were adjusted at the beginning of the year accounts for the different seasonality, relative to the base period. The social benefit expenditures of local authorities were also down in nominal terms on the base values, putting pronounced downward pressure on the real value of transfers.

The rise in the proportion of investment spending within local government expenditures is considered to be a positive development (see Table III-7). While there is a chance that local authorities will spend more on investment projects than last year, it is difficult to give a correct evaluation of the trend because of the plunge in the 1999 base index. Central government investment continued to be dominated by chapter and institutional spending, with a significant drop in the amount of funds directed at priority projects, even compared with the low base period values recorded last year.

**Table III-6 VAT in real terms**

Percentage changes on a year earlier

	Per cent									
	1998				1999				2000	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Domestic VAT revenues	4.8	4.2	3.0	-4.8	1.1	6.6	9.1	8.7	16.1	-4.8
Import VAT revenues*	15.5	18.7	16.7	8.8	-0.2	-1.4	-1.1	11.7	6.7	16.5
VAT refund**	7.5	8.4	11.9	10.7	8.9	3.2	-0.7	3.3	12.3	-2.4
Net VAT revenues	11.8	13.8	7.3	-5.2	-8.6	1.9	8.4	17.0	10.9	12.7

\* Adjusted by customs surety.

\*\* Based on estimated accrual-based settlement.

**Table III-7 Selected public expenditures in real terms**

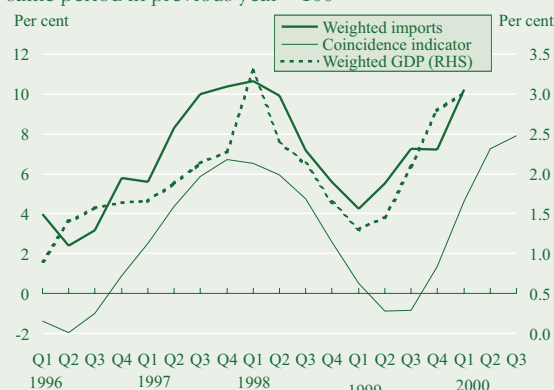
Percentage changes on a year earlier

	Per cent									
	1998				1999				2000	
	Q1	H1	Q1-Q3	Year	Q1	H1	Q1-Q3	Preliminary	Q1	H1
Pensions (including disability benefits)	4.7	5.4	8.4	9.2	6.9	6.9	4.3	4.1	-1.6	-0.9
Sick-pay	-4.9	-4.4	-2.0	0.1	1.5	1.7	1.4	2.4	6.1	15.1
Social benefits (central budget)	-0.8	-1.4	-2.3	-2.8	-15.9	-1.1	-2.6	0.0	11.9	-3.0
Social benefits (local authorities)	26.0	28.9	30.2	26.1	12.5	-0.4	-3.3	-6.0	-11.8	-13.4
<b>Household transfers, total</b>	<b>4.1</b>	<b>4.8</b>	<b>6.7</b>	<b>7.0</b>	<b>1.9</b>	<b>4.5</b>	<b>2.2</b>	<b>2.5</b>	<b>0.5</b>	<b>-1.7</b>
Investment (central budget)	-4.5	12.6	0.7	-12.4	-10.4	-12.4	-3.8	6.1	48.1	11.9
Investment (local authorities)	35.1	70.9	9.7	10.7	-8.0	-19.6	-15.2	-11.2	-5.7	9.3
<b>Gross investment expenditure</b>	<b>33.5</b>	<b>40.2</b>	<b>5.7</b>	<b>-1.0</b>	<b>-9.0</b>	<b>-16.5</b>	<b>-10.4</b>	<b>-3.8</b>	<b>15.3</b>	<b>10.6</b>

\* Source: Public sector statistics, therefore this differs from Central Statistical Office figures.

\*\* Using the price indices for public consumption and investment.

**Chart III-7 Foreign demand in Hungary's main export markets** Percentage change on a year earlier; same period in previous year = 100



**Table III-8 Main macroeconomic indicators in the euro area I**

Percentage change on a year earlier, seasonally adjusted data

	Per cent						
	1998		1999			2000	
	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Real GDP	2.0	1.8	2.0	2.5	3.1	3.4	
Domestic absorption	3.2	2.8	2.9	2.8	2.8	2.6	
Private consumption	3.1	2.7	2.4	2.5	2.5	2.4	
Public consumption	1.0	1.4	1.3	1.6	1.6	1.5	
Gross fixed capital formation	3.7	4.0	5.4	4.9	4.8	4.9	
Stockbuilding*	0.3	0.1	0.1	0.0	0.0	-0.1	
Exports	2.1	0.6	1.9	5.4	9.0	11.8	
Imports	5.8	3.5	4.5	6.6	8.3	9.9	
Net exports*	-0.8	-0.9	-0.8	-0.2	0.4	0.8	
New car registration**	6.3	6.7	8.5	6.4	0.1	1.5	0.4
Retail sales**	2.9	2.6	2.2	2.0	2.9	2.4	

Source: ECB Monthly Bulletin, August 2000.

\* Contribution to real GDP in terms of percentage points.

\*\* Seasonally unadjusted data.

**Table III-9 Main macroeconomic indicators in the euro area II**

Percentage change on a quarter earlier; annualised, seasonally adjusted data

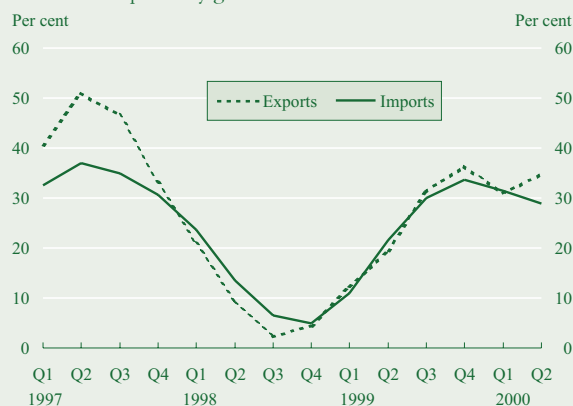
	Per cent				
	1999				2000
	Q1	Q2	Q3	Q4	Q1
Real GDP	2.8	2.4	4.1	3.6	3.6
Domestic absorption	3.6	1.6	2.0	3.6	3.2
Private consumption	3.2	1.2	3.2	2.0	2.8
Public consumption	3.6	0.4	1.2	0.8	3.2
Gross fixed capital formation	7.4	4.1	6.1	2.0	7.8
Stockbuilding*	-0.4	0.0	-1.2	1.6	-0.8
Exports	0.4	11.7	15.2	9.1	11.2
Imports	4.1	9.5	10.0	10.0	11.2
Net exports*	-1.2	0.8	1.6	0.0	0.4

Source: ECB Monthly Bulletin, August 2000.

\* Contribution to real GDP in terms of percentage points.

**Chart III-8 Export and import trends based on customs statistics**

Annualised quarterly growth rates in euro terms



## 4 External demand

External business conditions continued to improve in 2000 Q2. Consumer confidence in the euro area remained at the same high level as in the first quarter, simultaneously with a rise in the business confidence index. Data currently available show that euro-area GDP in 2000 Q1 rose by 3.4% on a year earlier (see Tables III-8 and III-9). We use the method described in the June Report to calculate external demand for Hungarian exports in terms of the import and GDP rates of our main trading partners weighted with the Hungarian export structure. In 2000 Q1, the year-on-year rise in this weighted GDP and effective imports was at 3% and 10.2%, respectively. Although no factual data are available for 2000 Q2 and Q3, existing information indicates that external business activity has gained momentum, as is also reflected by the OECD "coincidence" indicators, derived from the business cycle indices of Hungary's main trading partners (see Chart III-7).

The CEFTA countries have also benefited from the general improvement of business conditions. The acceleration of Russian economic growth has spurred economic development in the entire region. Poland registered a 6% rate of growth, and the Czech Republic and Slovakia regained their footing after the recession, with Czech GDP expanding by 4.4% in the first quarter. Thanks to high world prices for energy and commodities, the economies of CIS countries grew at a robust rate (with a 7.5% increase in Russian GDP during the second quarter).

In 2000 Q2, exports of goods and services rose by 20.6% year on year in real terms, with goods and services imports lagging somewhat behind at 16.2%. The contribution of the GDP balance of trade to growth remained positive. A change in comparison with the previous quarter, as described below, is seen in the fact that the improvement in the balance was equally due to favourable developments in the gross balance of trade based on services and customs statistics at constant prices.

In 2000 Q2, customs-statistics based exports and imports amounted to EUR 7,337 million and 8,221 million, respectively. There was a deficit of EUR 884 million in the balance of trade, up by 60 million on a year earlier.<sup>6</sup> The pick-up in foreign demand was among the factors boosting export growth in 2000 Q2, making it grow at a considerably higher rate than imports, which slowed during this period (see Chart III-8). In 2000 Q2, the balance of trade based on seasonally adjusted customs statistics recorded a lower deficit quarter on quarter (see Chart III-9). However, it is too early to say whether this is the beginning of a lasting trend, since the data at the unadjusted stage still show a slight deterioration. Nevertheless, in terms of volume data, exports are continuing to expand at a faster pace than imports (see Chart III-10) – moreover, the difference in growth rates between the two series is also increasing. Since the terms of trade continued to deteriorate (2.8%), the difference between export and import growth rates appears to be higher in terms of volume than value data. This deterioration is largely attributable to the increase in the world price for energy and commodities, while foodstuffs,

<sup>6</sup> Only preliminary data are available for the second quarter, as the processing of submitted customs declaration forms continuously provides new information. As the figures in this Report contain expected modifications, the final data may modify the current picture.

manufactured goods and machinery enjoyed improved terms of trade. The deterioration in the terms of trade worsened nominal GDP by 1.5%.<sup>7</sup>

The improvement in volume indices compared with the value data is also reflected in the constant price balance of trade (see *Chart III-11*), with the balance in euro terms remaining unchanged in contrast to the steady upward trend seen over the previous quarters, while the balances at constant prices picked up significantly over the last twelve months.

The country structure of exports also reflected the changes in external demand. Exports to developed countries continued to expand at a fast pace (see *Chart III-12*). The growth in exports to CEFTA countries, which started in 1999 Q1, gained momentum, in evidence of the recovery in the area, as well as increasingly buoyant activity (see *Chart III-13*). The second quarter witnessed a substantial, 47%, year-on-year rise in export levels to CIS countries in euro terms (see *Chart III-14 on page 38*). This is partly attributable to cross exchange rate effects, notably the weakening of the euro against the dollar, as the equivalent increase calculated in dollar terms was substantially smaller, at 29%. Furthermore, last year's low base values were also among the factors at work, as quarter-on-quarter seasonally adjusted data remained unchanged. Export developments over the short term indicate that Hungarian firms have not been able to take full advantage of the pick-up in business activity in the CIS area.

An analysis of the composition of exports reveals a continuation of the tendencies described in the June Report (see *Charts III-15 and III-16 on page 38*). Durables exports continued to top the list (up by 50.5% on a year earlier).<sup>8,9</sup> As a new development the second quarter saw signs of a slowdown in investment goods exports, which still remained significantly up in year-on-year terms (18.2%). This contrasts with the situation of Hungary's main trading partners, who experienced the strongest output growth in respect of this category of manufacturing. This is likely due in part to the high values of the base period. Non-durable consumer goods exports expanded at a slightly lower rate than in the previous quarter, while due to low base period rates, year-on-year growth appeared to remain unchanged compared with three months earlier. This is also associated with the relatively robust growth in Hungarian exports to the CEFTA area, with most products belonging to the non-durables category. The considerable, although slightly slowing, increase in intermediate goods exports excluding energy (up by 38.7% on a year earlier) is largely due to the quarter-on-quarter strengthening of external demand.

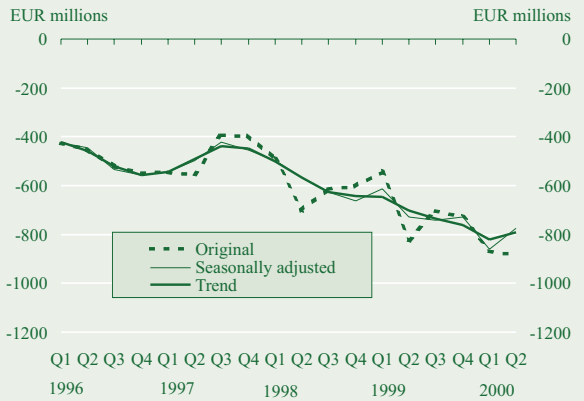
The SITC breakdown of exports (see *Chart III-17 on page 39*) in the second quarter clearly shows that food, beverages and to-

<sup>7</sup> This figure is derived from an approximating partial calculation, which only filters out the effect of price change without taking account of volume change. Clearly, this is not accurate, as in an general equilibrium framework any change in price will imply volume changes as well as further price and volume changes.

<sup>8</sup> Note that in contrast with the previous reports, in the course of analysing the composition of exports, energy-producing materials have been excluded from the intermediate goods category. In this way they can be examined in a separate series as a means of providing a better study of the effects of energy price changes.

<sup>9</sup> In the absence of sufficient data, the analysis of export composition refers to series which do not include the latest corrections.

**Chart III-9 Balance of trade based on customs statistics in euro terms**

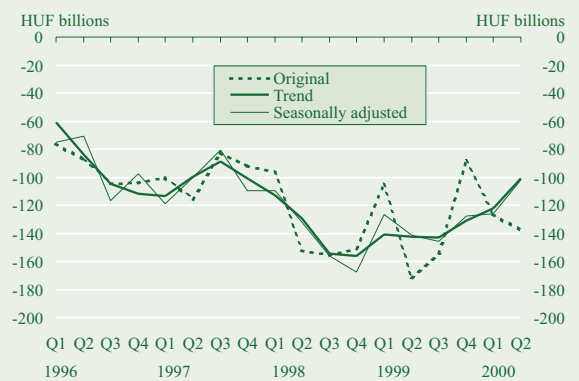


**Chart III-10 Export and import volumes**



**Chart III-11 Balance of trade based on customs statistics at constant prices**

Forint prices of 1996 Q1



**Chart III-12 Exports to developed countries**

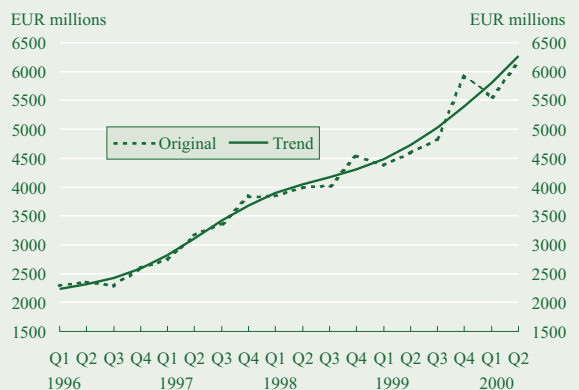


Chart III-13 Exports to CEFTA

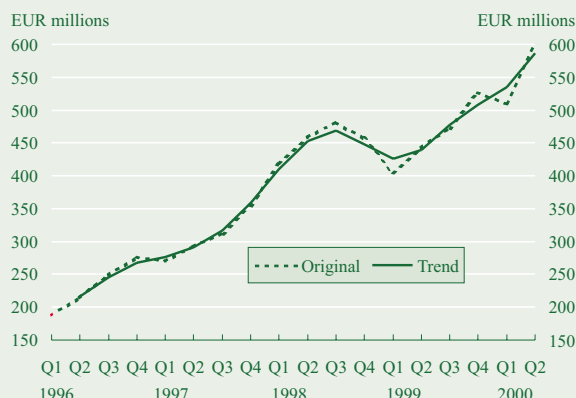


Chart III-14 Exports to CIS

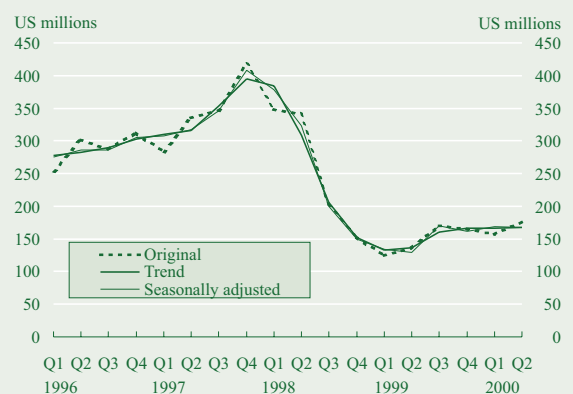


Chart III-15 Annualised trend growth rates in various export categories

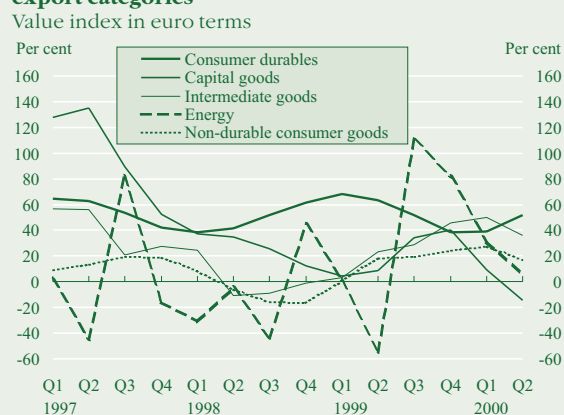
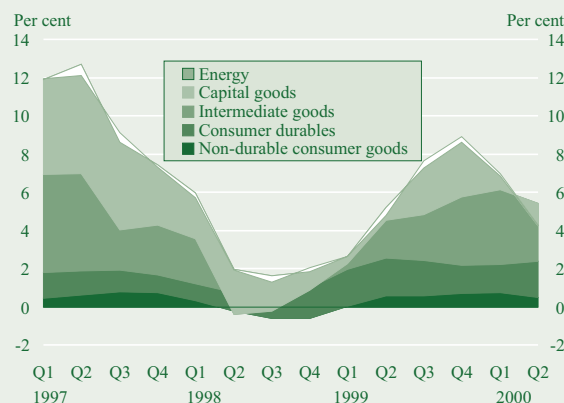


Chart III-16 Contribution of various product categories to export trend growth



bacco is the fastest-growing category (up 31% year on year), thanks, to the pick-up in demand in the CEFTA area. Machinery exports also excelled in terms of annualised trend growth (23.8%) and annual growth (37.4%). Since this category mainly consists of consumer durables and investment goods, consumer durables exports grew at a faster pace than the decline in investment goods exports, reflecting a kind of ongoing restructuring within the machinery category. Commodities and manufactured goods were exported at a steadily growing rate (up 27% and 21%, respectively, on a year earlier).

An analysis of the breakdown of imports (see Chart III-18) shows that in contrast to the previous quarter, the growth rate of consumer durables imports did not continue to increase – indeed, there was an annualised quarter-on-quarter decline of 3% in this category.<sup>10</sup> This may be partly due to a slowdown in the exceptionally high growth rates in the consumption of consumer durables seen over the past few years. Growth in investment goods imports also tapered off somewhat at the quarterly level, but still amounted to 12% in a year-on-year comparison. This may be related to a slowdown in the growth of machinery investment in the second quarter (though this was also higher than 11% in year-on-year terms). These factors might indicate that this trend is not going to turn around in the third quarter. The annualised growth rate of intermediate goods imports continued to exceed 30%, due to robust industrial production and the associated demand for imports. At the same time, non-durable consumer goods imports expanded at a more stable rate, growing faster than those of durable consumer goods (up by 26% on a year earlier). The twelve-month value index of energy imports rose sharply, by 80%, owing to energy price increases. In a quarter-on-quarter comparison, imports in this category grew at a rate approximating that seen in the preceding quarter.

In examining the contribution of the various product categories to import growth (see Chart III-19), one can see that intermediate and investment goods continue to top the list, due primarily to robust economic growth. In a new development, consumer durables imports seemed to be putting slight downward pressure on the overall import rate, for the first time in a long period of time, implying a shift in consumer demand from durables to non-durables. Energy-producing materials continued to play a major part in the increase in the import account.

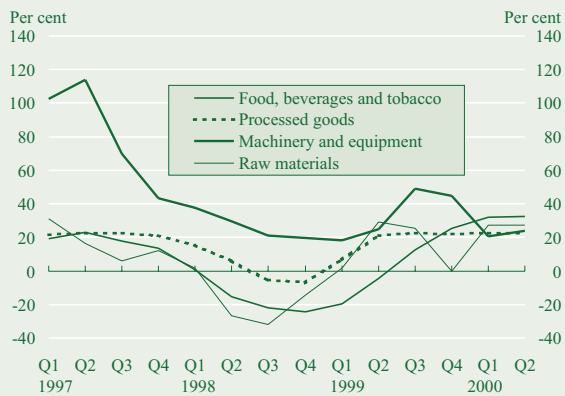
The favourable performance of the service category contributed significantly to the improvement of the external balance in the second quarter. The services balance in the balance of payments amounted to EUR 532 million, with the surplus up by EUR 232 million on 1999 Q2. The seasonally adjusted figure was EUR 60 million better than in the previous quarter, predominantly due to the increase in the travel surplus.

In 2000 Q2, the travel balance of EUR 953 million on the credit side and EUR 298 million on the debit side rendered a surplus of EUR 655 million, which was EUR 149 million up on a year earlier (see Chart III-20).

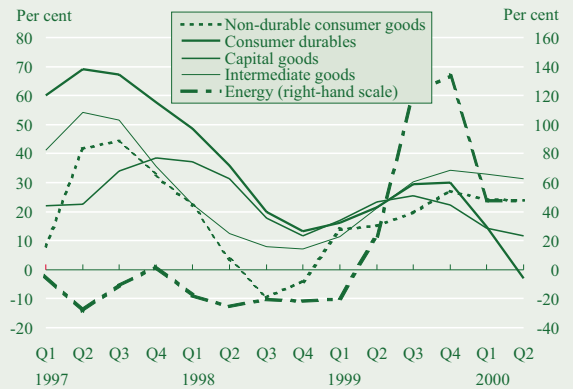
The seasonally adjusted increase in the travel balance even surpassed the first-quarter performance (see Chart III-21). The improvement in the balance is attributable to the 18%

<sup>10</sup> In the absence of sufficient data, the analysis of import composition refers to series which do not include the latest corrections.

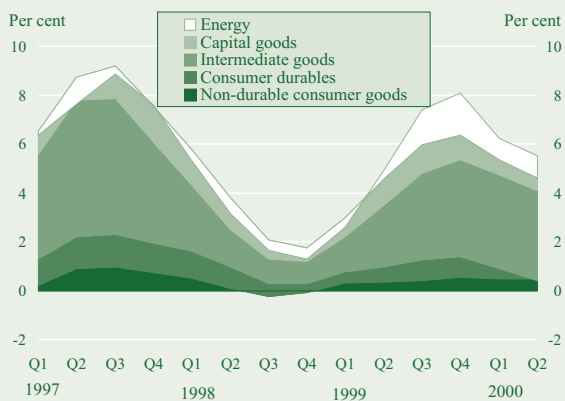
**Chart III-17 Annualised quarterly trend growth rates in the SITC-5 export categories**



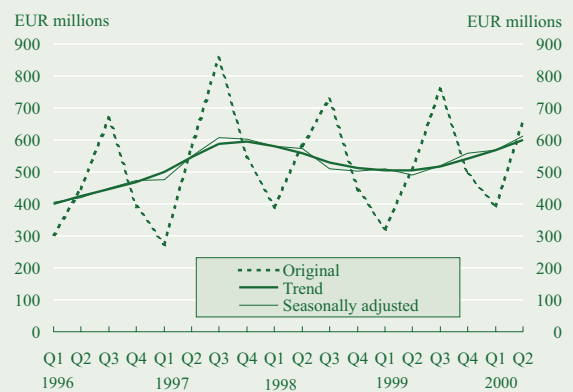
**Chart III-18 Annualised trend growth rates in various import categories**  
Value indices in euro terms



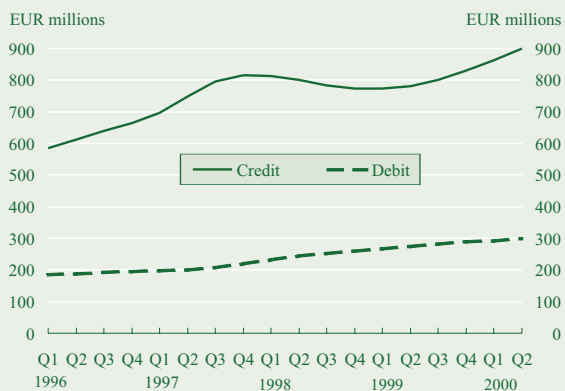
**Chart III-19 Contribution of various product categories to import trend growth**



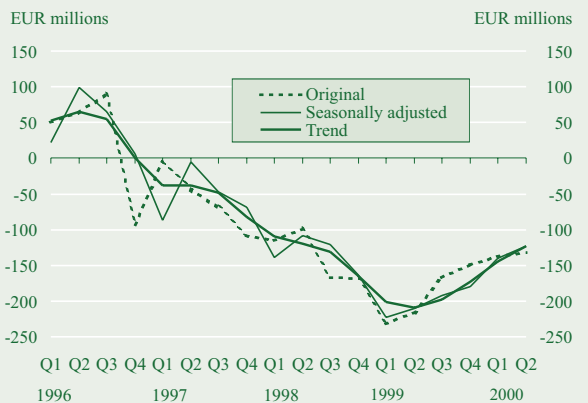
**Chart III-20 Travel balance**



**Chart III-21 Trend of travel receipts and expenditures**

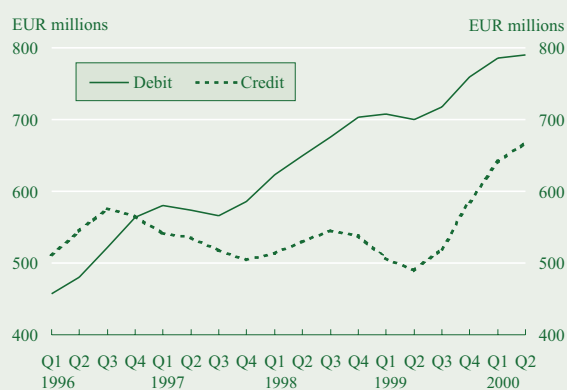


**Chart III-22 Balance of services excluding travel**



year-on-year rise in receipts and the 8% increase in expenditures, which continued at a subdued rate. Travel statistics show that compared with the previous year, the number of tourist arrivals in the second quarter rose by 20% for the first time in years, with an 8% rise in the number of tourist nights spent in public accommodation units, while there was merely a 4.2% rise in the number of Hungarians travelling abroad. The service balance excluding travel continued to improve in the second quarter, although at a slower pace than previously. EUR 663 million on the credit side and EUR 795 million on the debit side resulted in an EUR 132 million deficit (see Chart III-22), compared with EUR 216 million in

**Chart III-23 Receipt and expenditure trends of services excluding travel**



1999 Q2. This improvement was brought about by growing receipts in addition to flat expenditure levels. A close look at the performance of the different services reveals signs of long-term improvement in respect of the construction and installation items, as well as business services items. The improvement in the service balance seen over the past four quarters went hand in hand with stronger external demand and a pick-up in goods exports (see Chart III-23).



# IV. Supply

## 1 The labour market

This year's developments in the labour market indicate that the period of turbulent changes characteristic of the past one and a half years is all but over. Although the increase in employment and the decrease in unemployment and inactivity, as well as the resulting rise in the participation rate, are continuing without interruption, they have lost some of their momentum compared with the 1998–99 period. Hungary seems to have arrived at the closing chapter of the 'period of restructuring following the major negative labour market shock affecting the country in the early nineties. By now, the economic recovery has probably soaked up the unemployed and inactive groups with the most attractive qualities – an assumption also supported by the fact that the proportion of long-term unemployment is on the rise, the overall unemployment rate is flat and employment is expanding at a slower pace.

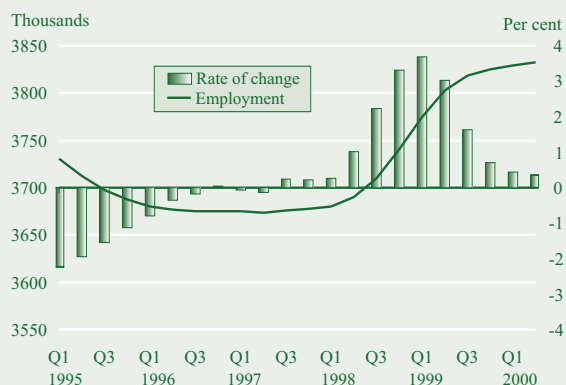
### 1.1 Employment

The household labour force survey of the Central Statistical Office shows that the rate of employment continued to expand in 2000 Q2. The number of employed people rose by 0.6% on a year earlier, and by 0.3% in terms of seasonally adjusted quarter-on-quarter data. The latter figure reflects a slowdown in growth, as can also be seen in *Chart IV-1*. What is indicated by the nearly 50% employment rate is that roughly half of the population of the 15–74 age group are employed, a rate above the average for 1993. The sharp drop in inactivity went hand in hand with a rise in the participation rate, although at 53.4% in the second quarter it is still below the initial values for 1993.

As far as individual age groups are concerned, although employment in the over-25 age groups was generally up, it was again the 55–59 age group whose employment rate increased most strongly relative to a year earlier. A regional breakdown indicates that, in contrast to the first quarter, 2000 Q2 witnessed the fastest year-on-year growth in employment not in the western areas of Hungary, characterised by high employment and very low unemployment rates, but in some disadvantaged areas in the northern parts of the country. It is still an open question, however, if this development was due to economic growth becoming more widespread or simply to the emergence of labour shortages in more developed regions.

According to the institutional employment statistics compiled by the Central Statistical Office based on a survey of businesses employing over five people, and budgetary and non-profit insti-

**Chart IV-1 Level of employment and the rate of change**



\* Seasonally adjusted data. The rate of change is shown on the right-hand scale.

tutions, there has been no apparent change in the trends seen in the previous quarter. The 0.9% year-on-year rise in the number of employed people, still moderate at the level of the whole economy, is composed of a 1.6% increase in private sector employment and a 1.5% drop in public sector employment. The rise in the labour force within the private sector involved nearly every sector of manufacturing and private services. Continuing the earlier trend, growth in the manual labour force employed in the basic and machines manufacturing sector was especially strong (9.1% and 10.6%, respectively), signalling an imminent danger of labour market bottlenecks triggered by the developments presented below in connection with the wages and hours worked. The *public sector* labour force continued to contract, due to a sharp drop of some 3.3% in blue collar labour, while the white collar labour force declined only negligibly.

## 1.2 Unemployment rate

The rate of unemployment continued to fall in the second quarter, although at a slower pace than previously (see *Chart IV-2*). This comes as no surprise considering the nature of Hungarian unemployment. As noted above, due to the fact that the economic recovery has already absorbed unemployed groups which were easier to employ, the rate of unemployment is not expected to continue falling at the 1–1.5-percentage-point rate seen earlier.

Based on the seasonally adjusted data, the rate of unemployment recorded in the second quarter, at just slightly below 6.5%, is much lower than in a number of advanced European economies. The unemployment rate as a *stock* concept is not relevant for monetary policy, as it is not the rate of unemployment that determines employer and employee real wage expectations, or the level of welfare, but the probability of entering or leaving unemployment (i.e. the *flow* rates). Due to the absence of adequate flow data, however stock data are the focus of regular analysis.<sup>1</sup>

## 1.3 Earnings growth

The Bank's second-quarter indices on wage inflation<sup>2</sup> reflect a sharp rise in the annual rate of earnings growth (see *Table IV-1*). The 13.3% average for the whole economy is composed of exceptionally high, 15.1%, private sector and a lower, 9.2%, rate of public sector wage inflation. The *public sector's* low second-quarter rate in comparison with the private sector is consistent with the government's anti-inflationary commitment. Our analysis of private sector developments reveals a great degree of uncertainty regarding some of the data and their interpretation. Although several factors underlying high wage inflation have been successfully identified, this uncertainty is only expected to be resolved when the inflation and labour market data on the forthcoming months become available.

<sup>1</sup> For more on this topic, see NBH Working Papers Series, 1999/5, also available on the Bank website.

<sup>2</sup> Calculated by the National Bank of Hungary, these figures differ from the gross wage indices published by the Statistical Office. For more on the method of calculation, see page 47, June 2000 Report.

**Chart IV-2 Unemployment rate\***



\* On the basis of seasonally adjusted data.

**Table IV-1 Wage inflation**

Percentage changes on a year earlier

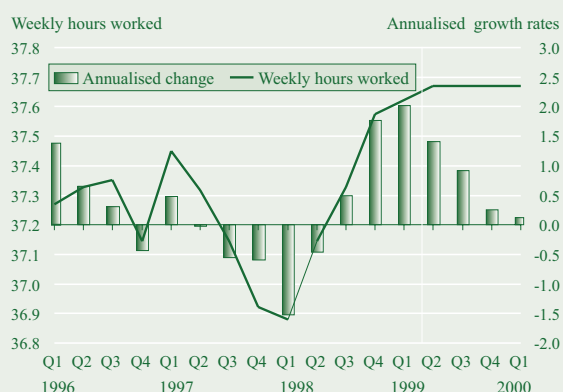
	1999				1999 H1	1999	2000		2000 H1
	Q1	Q2	Q3	Q4			Q1	Q2	
Manufacturing	13.7	14.3	14.3	14.4	14.3	14.2	11.5	15.1	13.3
Retail and repairs	13.8	11.9	6.4	18.3	12.4	12.6	15.2	17.5	16.4
Other private sector services	17.7	19.2	18.3	13.3	15.8	17.1	11.1	14.9	13.0
Private sector	14.9	15.6	13.6	13.4	13.5	14.4	11.4	15.1	13.2
Public sector	16.1	17.7	16.8	17.2	17.0	17.0	12.1	9.2	10.6
<b>Total</b>	<b>15.3</b>	<b>16.3</b>	<b>14.5</b>	<b>14.6</b>	<b>14.6</b>	<b>15.2</b>	<b>11.6</b>	<b>13.3</b>	<b>12.4</b>

The jump in *private sector* wage inflation in 2000 Q2 seems to have *universally* affected nearly all sectors with businesses employing over 5 people, as is shown by the institutional labour statistics compiled by the Central Statistical Office. At the same time, thanks to very low first-quarter indices, in most sectors average wage inflation for the *first half* of 2000 remained lower than the averages for both the second half of 1999 and the year as a whole. The surprisingly “universal” nature of the increase in wage indices and the divergence between the data from the two quarters implies that the sharp second-quarter jump in wage indices may be due to technical factors. It cannot be ruled out, on the other hand, that the underlying reason is a retroactive correction in the second quarter, prompted by the slower-than-expected progress of disinflation. This inference seems to be supported by the rising proportion of irregular payments relative to 1999. Therefore, the authors of this Report believe that in order to *obtain the most useful information, the average of the data from the first half of the year should be examined*. Thus, on the basis of data from the first six months of 2000, wage inflation in the category of other private services excluding manufacturing and retail seems to have slowed, while that in the retail and repair sector gathered pace relative to 1999 H2. According to six-month data the decline in wage inflation slowed down, reflecting the existence of a certain degree of *nominal inertia*, as noted in Chapter I. The fluctuation of wage indices within the double-digit range can also be considered as being a sign of uncertainty regarding the imagined future path of real wages or, more precisely, nominal wages and prices. On the other hand, the first half of 2000 also witnessed the highest *real growth in manufacturing productivity* seen in recent years. Per capita *real growth in manufacturing productivity* amounted to 14% on a value added basis and over 20% in gross terms, boosting corporate profitability to such an extent that it prevented nominal wage increases due to potential regional or sectoral labour market bottlenecks from threatening competitiveness of manufacturing companies (*see section 3, Chapter IV*).

Coming on the heels of the low indices for 2000 Q1, the sudden upsurge in wage inflation affecting the private sector in the second quarter may be due to technical factors, partly associated with the method of calculating wage inflation, as described in the June Report (p. 47). In the absence of actual data on wage rates and sufficiently long series enabling adjustment based on regression, the bias arising from the variation in workdays and the number of hours worked is filtered out from published gross wage figures mechanically, via subsequent adjustment, which could possibly lead to ‘overadjusted’ indices. This can occur if the figures on the number of hours worked exhibit stronger variation due to calendar effects than the wage data themselves (*see Chart IV-3*). It should be remembered that 1999 Q1 had a much lower monthly number of hours worked than 2000 Q1, and this was corrected in the second quarter. The base-period effect may have introduced<sup>3</sup> a downward bias into indices for 2000 Q1 (as the

<sup>3</sup> National Bank researchers are making constant efforts to devise an indicator offering a more accurate picture of wage inflation. Unfortunately, the temporal incomparability of available statistics limits the effectiveness of these efforts. Although the indices adjusted for the alternative number of hours narrow the gap between the different wage growth rates in the two quarters, the rate is still higher in the second quarter: after correcting *only* for regular payments, wage inflation estimates amount to 12.6% in the first quarter compared with 14.9% in the second quarter.

**Chart IV-3 Average number of weekly hours worked by the blue-collar labour force in manufacturing and its annual index**



**Chart IV-4 Percentage changes in the manual labour force and monthly hours worked in machines manufacturing and metal manufacturing combined\***  
Same period a year earlier = 100, indices



\* Calculated from seasonally adjusted trend-cycle data. Along the 45° straight line the number of employed people and the number of hours worked change at the same rate.

number of hours is in the denominator), and an upward bias into those for the second quarter. The fact that the average number of hours worked, down in the wake of the 1998 Russian crisis, began to gradually increase in the course of 1999 and 2000 had a similar effect (see Chart IV-3).

The temporal distribution of wage-type *payments received on an irregular basis* caused a similar, but temporary problem. The *proportion* of such components other than basic pay (such as bonuses, commissions, 13<sup>th</sup> month's salaries, etc.) within the *overall wage bill* increased strongly in 1999 Q1, followed by a downward correction in the second quarter. This introduced an upward bias into the wage level for 1999 Q1, making this year's first-quarter index lower in comparison and, conversely, the second quarter's higher. Thus, the private sector's average annual index of wages received on an irregular basis dropped below 10% in 2000 Q1 and jumped above 20% in Q2, introducing considerable noise into the overall earnings index because of its significant weight of 15–20%.

When analysing wage inflation by sectoral breakdown, the *manufacturing sector* deserves special attention. As in the preceding period, the increase in wage inflation to 16.1% was largely due to the upsurge in production within two major sectors, *machines manufacturing* and *basic metal manufacturing*, displaying high wage inflation rates of 16.3% and 17.3%, respectively. Thanks to exceptionally strong productivity rates, these high wage inflation indices are not associated with any deterioration in corporate competitiveness (see section 3/IV). Hence, they signal no direct inflationary pressure as there is no problem with profitability, which could trigger price increases (see Chart IV-4). Moreover, the output of the manufacturing sector is typically composed of tradables, subject to competition in external markets, which keeps price increases within limits. However, the question of labour market bottlenecks, also discussed in a number of previous *Reports*, cannot be avoided. The manual labour force in the two vertically intergrated sectors mentioned above expanded rapidly, simultaneously with the average number of hours worked. It has already been noted that in the western areas of Hungary, dominated by these two sectors, the rate of unemployment is the lowest in a nation-wide comparison, down to nearly 4% in the second quarter. As noted in our previous *Reports*, these together can be regarded as a sign of labour market tightening.

The high first-quarter annual wage index (15.2%) produced by the *retail and repair* sector within private services rose even further, to 17.5%, in the second quarter. Just as in manufacturing, the second-quarter 11% rise in retail turnover at current prices could be, at least to a certain extent, interpreted as improvement in productivity, given that neither the number of workers nor the hours worked grew at a similarly high rate. Thus, it seems quite probable that while there are no difficulties in terms of profitability, some labour market tightness cannot be ruled out. The relatively low first-quarter wage inflation (11.1%) in the category of *other private services* rose to 14.9% in the second quarter. This category is probably also characterised by some combination of the factors discussed above: uncertain and lingering inflation expectations coupled with the recently tighter labour market situation. As regards the latter, it has been noted on several occasions that the area of transport, storage, postal services and communi-

cation has been affected by *white-collar* labour market bottlenecks (probably due to a sharp pick-up in *telecommunications*). Wage inflation with respect to the white-collar labour force in the sector jumped to 20% in the second quarter. The 16.4% average in the first quarter, which can be considered rather high, is still much lower than the average for the second half of 1999 (21.2%). This seems to support the Bank's view that even if not clearly reflected in the wage indices of this sector, the steady rise in the number of hours worked by white-collar employees indicates tensions in the labour market.

## 2 Capacity utilisation

In the second quarter of 2000, growth in average capacity utilisation<sup>4</sup> in the manufacturing industry continued in terms of the seasonally adjusted data, bringing its level back to the exceptional rates last seen in late 1997 and early 1998 (see Chart IV-5). This increase in capacity utilisation took place against the background of dynamic output and export growth and a slight pick-up in manufacturing investment growth. The high rate of capacity utilisation and the favourable sales possibilities suggest a possible further acceleration in investment activity.

Business prospects are universally expected to improve by a widening group of economic agents, as reflected by the smaller deviation of sectoral responses on expected capacity utilisation from the whole-economy average (see Charts IV-6 and IV-7).

Relative to orders expected over the next 12 months, companies' excess technical capacities started to fall as of mid-1999, with a simultaneous rise in the proportion of firms reporting capacity shortages. These tendencies also foretell a prospective strengthening of investment activity, at a low ebb for the time being.

Export-oriented businesses are less characterised by unutilised capacities, with most of the firms which reported surplus capacities for the coming 12 months catering primarily to the domestic market. It is intriguing, at the same time, that the proportion of machines manufacturing companies with both low and surplus capacities was well above the average relative to demand and prospective orders, respectively, implying significant discrepancies between the structures of production and demand. It is predominantly machines manufacturing firms, metallurgical and fabricated metal manufacturing companies that appear to be discontent with the quality and technological development of capacities.

## 3 Competitiveness

In the second quarter of 2000, the forint's nominal effective exchange rate index depreciated by 6.1% on a year earlier. This was nearly 1% above the official rate of devaluation of the central parity. The discrepancy between the two indices was predomi-

<sup>4</sup> The survey used as the source of the above information did not cover a few large multinational companies with manufacturing operations in Hungary – which carry exceptional weight on account of their sales revenues. (The Situation and Short-Term Prospects of Manufacturing and Construction Industry Enterprises in July 2000, a quarterly survey on the business cycle, by Kopint-Datorg, July 2000)

**Chart IV-5 Average capacity utilisation in the manufacturing industry\***



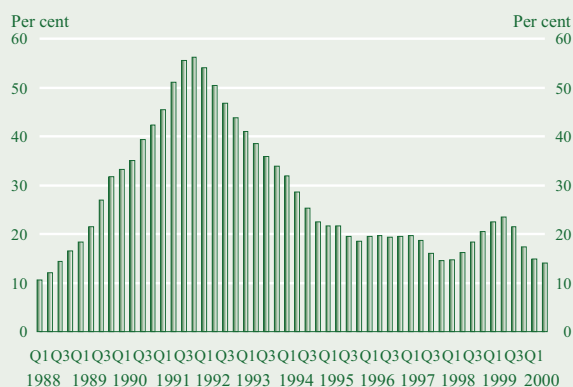
\* Seasonally adjusted data. Source of data: Kopint-Datorg.

**Chart IV-6 Share of firms with a shortage of capacities in manufacturing\***



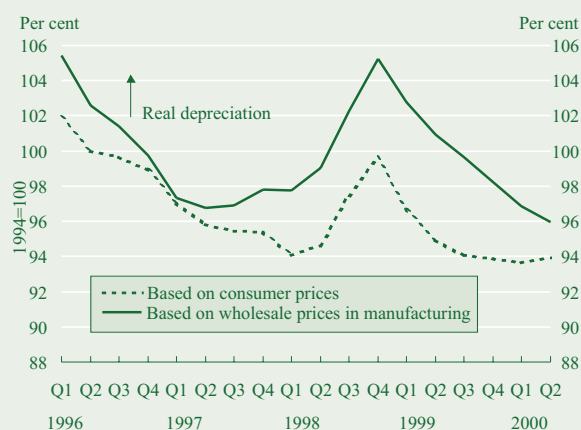
\* Seasonally adjusted data. Source of data: Kopint-Datorg.

**Chart IV-7 Share of firms with a surplus of capacities in manufacturing\***

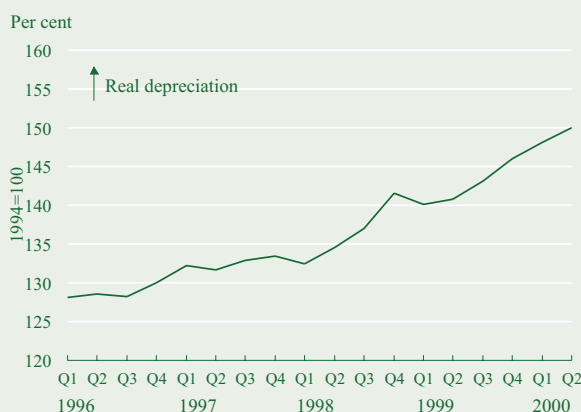


\* Seasonally adjusted data. Source of data: Kopint-Datorg.

**Chart IV-8 Real exchange rates based on the CPI and the manufacturing price index**



**Chart IV-9 Real effective exchange rate of the forint based on unit labour costs in manufacturing**



nantly due to cross rate movements, with the intraband fluctuations of the forint not playing a major role. Thus, in 2000 Q2, cross rate movements had a substantial impact on the nominal effective price index.

In the course of the second quarter, price and wage cost indicators essentially continued the trend seen in the second half of 1999 and the first quarter of 2000, when competitiveness continued to be affected by the rise in the world oil prices as an exogenous shock (see *Chart IV-8*).

The CPI-based real exchange rate remained stable, relative to 1999 H1. Considering, however, that the euro weakened considerably against the dollar as compared with last year, the trend real exchange rate, with the effects of cross rates and intraband volatility removed, reflected the equilibrium appreciation estimated by the Bank over the long term (the rate of appreciation was about 2% relative to 1999 Q2).

The manufacturing-based real exchange rate continued its stable upward trend first seen in late 1998, initially due to the intraband movements of the forint – as noted in previous *Reports* – and, from the second half of 1999, due to oil prices feeding through to domestic retail prices. The roughly 6% annual rate of real appreciation observed in 2000 Q2 continued to be high, mainly reflecting – as pointed out in the *March Report* – a composition effect arising from the different structures of Hungarian and foreign price indices. Another explanation may be that, due to lower rates of inflation, Hungary's main trading partners reprice commodities at less frequent intervals, which allows oil price increases to feed through to foreign effective producer prices only after some lag, in contrast with the Hungarian manufacturing price index. This may later tend to dampen the growth rate of manufacturing-price-based real appreciation.

In 2000 Q2, the index based on unit labour costs depreciated by 6.2% on a year earlier, similar to the trend seen in the previous quarter. This was essentially due to the ongoing rapid growth in the manufacturing value added, thanks to a sharp increase in export sales. Manufacturing wage costs also rose considerably (by 14.9% on a year earlier), but together with the jump in productivity, this did not worsen profitability in the sector, as is also reflected in the marked improvement of the unit labour cost-based real exchange rate (*Chart IV-9*).

# V. External equilibrium

## 1 Net savings position

The structural shift in the Hungarian economy seen in 2000 Q1 continued in the second quarter, further improving the external balance position. Despite a deterioration in the terms of trade,<sup>1</sup> the deficit on the balance of trade recorded within the structure of the gross domestic product<sup>2</sup> remained essentially unchanged in nominal terms, reflecting a 0.3 percentage point fall as a proportion of GDP. Export and import volume indices, which filter out the effect of the deterioration in the terms of trade, appeared even better. The trade deficit was much lower than that justified by robust economic growth. On the whole, the favourable cyclical position of the economy went hand in hand with stronger growth in external financing. The fact that real economy use of foreign assets expanded at a subdued rate is partly attributable to the fact that the volume index for consumption remained over 2 percentage points below the rate of economic growth, and the investment growth rate, which is relatively import intensive, also did not exceed the rate of economic growth. Over the short term, investment spending is likely to increase at a faster rate, boosting the need for foreign funds. Nevertheless, against the background of the current situation and continued buoyant activity, also supported by the results of business cycle surveys undertaken by Hungary's main trading partners, the increase in the import requirement generated by stronger domestic demand will, in all likelihood, be offset by higher current receipts from exports. On these grounds, the GDP-proportional level of foreign financing for the rest of the year may be similar to that seen in the second half of 1999.

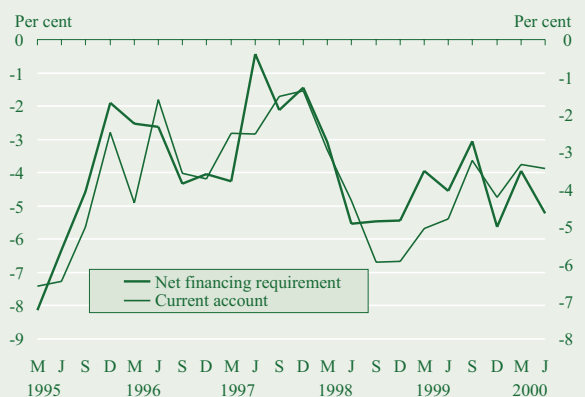
Against the background of positive real-economy performance, the second quarter saw a rise in profit repatriation through foreign residents' current transfers,<sup>3</sup> which raised the country's net financing requirement by about 1 percentage point of quarterly GDP (see Chart V-1). Nevertheless, the transfer outflows and inflows in the previous quarter were evenly balanced – a development unseen for the past five to eight years. Therefore,

<sup>1</sup> This deterioration was primarily due to soaring world energy prices, up by 87.5% over the course of 12 months since mid-1999. Twelve-month figures on world commodity prices were also among the factors worsening the terms of trade, although the trend is now on a downward path, with falling second-quarter prices in the world market.

<sup>2</sup> Exports and imports as recorded in the National Accounts.

<sup>3</sup> Within foreign current transfer payments, the balance was affected by both negative and positive influences. In 2000 Q2, the balance of profit transfers as a proportion of GDP exceeded the values recorded over the past five years. Although the item of unrequited transfers recorded a surplus, it was not sufficient to offset the deficit generated on profit transfers.

**Chart V-1 Seasonally adjusted net financing requirement and current account deficit as a percentage of GDP\***



\* Net financing requirement denotes the saving – investment balance of the economy adjusted for inflation, which in turn defines a theoretical current account balance.

Table V-1 Inflation-adjusted saving and investment by sectors as a percentage of GDP \*

	1998					1999					2000		Per cent
	Q1	Q2	Q3	Q4	Year	Q1	Q2	Q3	Q4	Year	Q1	Q2	
<b>Gross domestic product</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	
+ net income transfers	-2.9	-5.4	-3.2	-4.3	-4.0	-2.0	-4.0	-2.4	-4.8	-3.4	-2.1	-5.8	
+ unrequited transfers	1.7	2.2	2.6	2.2	2.2	1.6	1.8	2.3	2.0	1.9	2.1	2.3	
<b>Disposable income</b>	<b>98.8</b>	<b>96.8</b>	<b>99.4</b>	<b>97.8</b>	<b>98.2</b>	<b>99.6</b>	<b>97.8</b>	<b>99.8</b>	<b>97.2</b>	<b>98.6</b>	<b>100</b>	<b>96.5</b>	
- households	72.8	69.4	70.9	70.8	70.9	74.9	69.7	70.6	69.6	71.1	73.0	68.3	
- corporate sector	12.7	14.5	14.8	12.4	13.6	13.1	16.5	15.6	12.3	14.4	12.9	14.1	
- public sector	13.3	12.9	13.7	14.6	13.6	11.5	11.6	13.7	15.3	13.1	14.1	14.0	
<b>Final consumption</b>	<b>75.4</b>	<b>71.6</b>	<b>71.3</b>	<b>71.8</b>	<b>72.4</b>	<b>77.8</b>	<b>73.2</b>	<b>72.6</b>	<b>71.8</b>	<b>73.7</b>	<b>77.2</b>	<b>72.8</b>	
- household consumption	64.8	61.4	61.3	61.9	62.3	66.2	62.6	62.6	62.1	63.3	65.9	62.4	
- public consumption	10.6	10.2	10.0	9.9	10.2	11.6	10.5	10.0	9.7	10.4	11.3	10.4	
<b>Gross savings **</b>	<b>23.4</b>	<b>25.2</b>	<b>28.1</b>	<b>26.0</b>	<b>25.7</b>	<b>21.7</b>	<b>24.7</b>	<b>27.3</b>	<b>25.4</b>	<b>24.9</b>	<b>22.8</b>	<b>23.7</b>	
- households	8.0	8.0	9.6	8.9	8.7	9.1	7.5	8.6	8.0	7.8	7.0	5.9	
- corporate sector	12.7	14.5	14.8	12.4	13.6	12.7	16.1	15.0	11.4	14.4	12.9	14.1	
- public sector	2.7	2.7	3.7	4.7	3.5	-0.1	1.1	3.7	6.1	2.7	2.9	3.7	
<b>Net capital transfers</b>													
- households	0.4	0.3	0.2	0.1	0.2	0.4	0.3	0.2	0.1	0.2	0.4	0.3	
- corporate sector	1.0	1.0	1.2	2.2	1.4	1.0	0.9	1.2	1.1	1.1	0.8	0.7	
- public sector	-1.4	-1.3	-1.4	-2.3	-1.6	-1.4	-1.2	-1.4	-1.2	-1.3	-1.2	-1.1	
<b>Investment</b>	<b>26.9</b>	<b>30.4</b>	<b>30.4</b>	<b>30.7</b>	<b>29.7</b>	<b>26.5</b>	<b>29.5</b>	<b>27.9</b>	<b>30.9</b>	<b>28.8</b>	<b>27.8</b>	<b>29.6</b>	
- household investment	5.8	3.1	4.1	3.8	4.2	5.5	5.8	6.4	4.7	5.1	5.1	4.7	
- corporate investment and inventories	18.8	23.8	22.6	21.7	21.8	18.6	20.4	19.1	21.0	20.5	20.0	22.0	
- public investment	2.2	3.5	3.7	5.2	3.7	2.3	3.3	2.4	5.2	3.2	2.7	2.9	
<b>Net foreign financing requirement</b>	<b>-3.5</b>	<b>-5.2</b>	<b>-2.3</b>	<b>-4.6</b>	<b>-3.9</b>	<b>-4.7</b>	<b>-4.8</b>	<b>-0.6</b>	<b>-5.5</b>	<b>-3.9</b>	<b>-4.9</b>	<b>-5.9</b>	
Financing capacity of households	2.6	5.2	5.7	5.2	4.7	4.0	2.0	2.4	3.5	3.0	2.3	1.6	
Corporate sector financing requirement	-5.1	-8.3	-6.6	-7.0	-6.8	-4.9	-3.3	-2.9	-8.5	-5.1	-6.3	-7.2	
Public sector financing requirement	-1.0	-2.1	-1.4	-2.8	-1.9	-3.8	-3.5	-0.1	-0.4	-1.8	-1.0	-0.3	

Notes: Bank estimates. Due to rounding, the total of individual entries may differ from the total presented in the table.

\* Indicators approximate the accruals concept. Savings do not contain forint effects from exchange rate changes on household deposit and credit portfolios. Interest expenditure in the general government balance (GFS deficit less proceeds of privatisation) is presented using the accruals concept.

\*\* Gross savings = disposable income (gross, i.e. including the value for depreciation in the given year) less final consumption.

Disposable income includes the sum of the gross domestic product for the given period and the balance of the income transfers and unrequited transfers to non-residents and by non-residents to Hungary (according to balance-of-payments statistics).

the average of the two quarters, i.e. the first half of 2000, deteriorated by merely 0.4 percentage points of GDP, as a natural consequence of high corporate profitability and the steady expansion in the proportion of foreign ownership.

There has been a clear shift in the distribution of disposable income among economic agents relative to 1999. This was partly because government receipts in the first half of 1999 fell short of projected values, with the simultaneous emergence of extraordinary budgetary expenses, exerting temporary upward pressure on private sector<sup>4</sup> incomes. By contrast, in 2000, the distribution of incomes almost matched the situation seen in the first half of 1998 - in other words, a rise in the share of the general government, due to a decrease in interest burdens and improvement in the government's primary balance (see Table V-1).

Households increased their consumption and investment at a faster pace than their disposable income, bringing net financing capacity down to 1.6% of GDP. This, in turn, was reflected in stronger household borrowing, which was also encouraged by the development of money markets, which is facilitating a change in the structure of households' financial assets towards a portfolio characterised by a higher debt/income ratio than is currently the case. This means that the tendency seen over the past few quarters - that of individuals cutting back on their financial savings - will likely continue in the future as well.

Corporate profitability turned up, thanks to robust economic growth. While available data reflect a considerable rise in the wage bill, this is offset by an upturn in profitability. Nevertheless, the level of companies' own financial assets was affected by a number of temporary and contradictory factors, causing their GDP-proportional disposable income to fall by 2 percentage

<sup>4</sup> Denoting financial and non-financial companies and households.



points below the level for the same period last year. First, current transfers by foreign residents increased, drawing on corporate finances to a greater-than-usual extent: essentially this was due to the postponement of first-quarter payments to the second quarter. Another major factor is associated with general government policy in connection with corporate incomes. As will be remembered, in 1999 Q2, the base period, the government temporarily left incomes within the economy. With these two temporary effects removed, corporate disposable income would have increased by 0.5–0.8 percentage points on a year earlier. Although the deterioration in the terms of trade may also have put a downward pressure on the incomes generated by robust economic growth, its effect was not significant.

In addition to the above-noted factors, the increase in the corporate financing requirement was due to rising investment spending by companies at current prices and as a proportion of GDP. This increase took place against a background of changes in price structure, rather than stronger growth in investment volume. In contrast to 1999, when the investment price index was lower than the GDP deflator, this figure was higher by nearly 2 percentage points in 2000 Q2. While the remainder of the year is not likely to witness any significant change in the income relations between the budget and the corporate sector, foreign transfers may put upward pressure on companies' GDP-proportional disposable income. The prospective rise in investment is likely to increase corporate borrowing over the coming period.

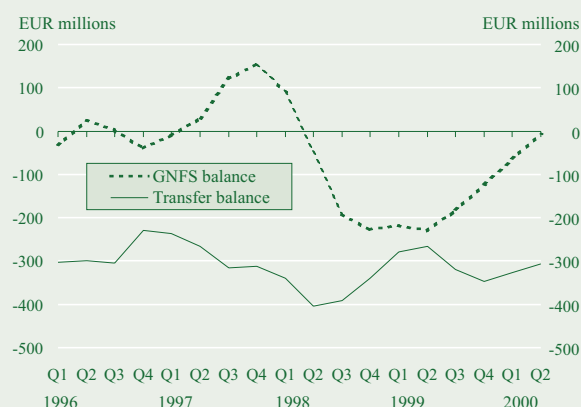
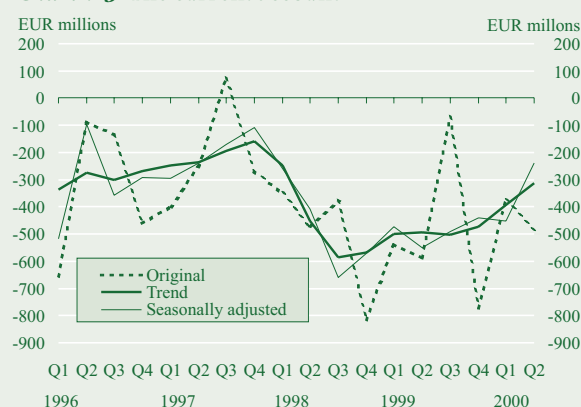
The deterioration in individuals' financing capacity and companies rising borrowing requirement, due to one-off and temporary effects, pushed up the private-sector's financing need, which, *ceteris paribus*, would have increased the external financing requirement by about 4 percentage points. However, this potentially negative impact in respect of the external balance was mitigated by the government's declining financing requirement. The general government improved its position over a year earlier at a spectacular rate of over 3 percentage points. This decline in the government's financing need is still clearly visible even when the effects of last year's extraordinary factors are removed. Robust economic growth and the slower-than-expected decline in inflation boosted general government receipts, but even this surplus did not result in a rise in expenditures over the planned levels, with the unscheduled costs incurred as a result of the natural disasters and related subsidies being covered via a reallocation of budgetary funds. Investment by the public sector also expanded at a lower rate than economic growth. Furthermore, the sector's financing requirement remained unchanged even compared with the low levels seen in 1999 H2 (–0.3% of GDP).

## 2 The current account and its financing

At the end of 2000 Q2, the deficit on the current account of the balance of payments amounted to EUR 482 million (*see Table V-2*). The slightly improving trend in the balance of goods trade, first seen in early 1999, continued, simultaneously with an improvement in the balance of services, in contrast with the for-

Table V-2 The current account

	EUR millions					
	1999 Q2	2000 Q2	Change	1999 Q1–2	2000 Q1–2	Change
1 Goods	–503	–427	76	–970	–938	32
Credit (exports)	4,787	6,796	2,009	9,431	12,843	3,412
Debt (imports)	5,290	7,222	1,933	10,401	13,781	3,379
2 Services	290	523	233	381	777	397
Travel, net	506	655	149	829	1,047	219
Other services, net	–216	–132	84	–448	–270	178
3 Incomes	–451	–713	–262	–660	–950	–290
On debt, net	–161	–239	–78	–371	–436	–65
On non-debt, net	–291	–475	–184	–289	–514	–225
4 Current transfers	74	135	61	122	250	128
<b>Current account (1+2+3+4)</b>	<b>–590</b>	<b>–482</b>	<b>108</b>	<b>–1,128</b>	<b>–860</b>	<b>268</b>

**Chart V-2 Real-economy transactions and the trend of the transfer balance****Chart V-3 The current account****Table V-3 Financing the current account**

	EUR millions					
	1999 Q1	2000 Q1	Change	1999 Q1-2	2000 Q1-2	Change
<b>(1) Current account deficit</b>	<b>590</b>	<b>482</b>	<b>-108</b>	<b>1,128</b>	<b>860</b>	<b>-268</b>
<b>(2) Total financing</b>	<b>859</b>	<b>449</b>	<b>-410</b>	<b>1,651</b>	<b>830</b>	<b>-821</b>
– non-debt (=2b.1+2c.1)	<b>913</b>	<b>221</b>	<b>-693</b>	<b>1,484</b>	<b>501</b>	<b>-983</b>
– debt (=2a+2b.2+2c.2)	<b>-54</b>	<b>228</b>	<b>282</b>	<b>168</b>	<b>330</b>	<b>162</b>
(2a) NBH and the government (=2a.1+2a.2)	6	234	228	278	-125	-403
(2a.1) Debt transactions	683	71	-612	845	-2	-847
– o/w government securities	75	24	-51	138	583	445
(2a.2) International reserves	-677	163	839	-568	-123	445
(2b) Private sector (=2b.1+2b.2)	575	-443	-1018	828	49	-778
(2b.1) Equity transactions	640	-258	-898	806	-209	-1,015
– Credit institutions	2	67	66	-6	72	77
– Corporate and other sectors	639	-325	-964	812	-281	-1,093
(2b.2) debt transactions	-65	-185	-120	22	259	237
– Credit institutions	-174	-59	115	-160	643	803
– Corporate and other sectors	109	-126	-235	181	-385	-566
(2c) Direct investment (=2c.1+2c.2)	278	658	380	546	906	360
(2c.1) Equity capital	273	478	205	678	710	32
– in Hungary	346	517	171	774	752	-22
– Abroad	-73	-39	34	-96	-42	54
(2c.2) Intercompany loans	5	179	175	-132	196	327
– in Hungary	10	187	176	-121	207	328
– Abroad	-5	-7	-2	-10	-11	-1
<b>(3) Capital account</b>	<b>-121</b>	<b>69</b>	<b>190</b>	<b>-133</b>	<b>84</b>	<b>217</b>
<b>NEO (=1-2-3)</b>	<b>-148</b>	<b>-36</b>	<b>113</b>	<b>-390</b>	<b>-54</b>	<b>337</b>

mer negative tendencies. Thus, in a year-on-year comparison, real-economy transactions improved the current account balance by a total of EUR 310 million. As far as the individual items of the transfer balance are concerned, the deficit recorded in the income line was in excess of EUR 710 million, marking a year-on-year increase of over EUR 260 million, primarily due to stronger income outflows from non-debt-generating investments (see Chart V-2). The rise in the surplus on current transfers was unable to offset this increase in the deficit. All in all, the balance of payments current account seems to be on an improving trend (see Chart V-3).

The second-quarter deficit on the current account of the balance of payments was financed by nearly equal amounts of non-debt-generating (EUR 221 million) and debt-generating (EUR 228 million) net capital inflows (see Chart V-4 and Table V-3). The former type of financing was characterised by two opposing developments. Net foreign equity purchases within direct investments (up dramatically over the first quarter) amounted to EUR 478 million, an amount sufficient in its own right to finance the second-quarter deficit on the current account. However, the other component, the purchase of net foreign equity within portfolio investment showed a capital outflow of EUR 258 million. Outflow through this channel is not unheard of, with the latest example occurring in 1998 Q2 when foreign residents' net equity sales were most likely associated with the uncertainty surrounding the elections. By contrast, capital outflow this time, especially in comparison with net inflows of EUR 640 million a year earlier, marks a major change. It should be noted, however, that in 1999 Q2, portfolio investments also included privatisation revenues amounting to EUR 260 million, whereas 2000 Q2 saw no such investment orchestrated by the Hungarian Privatisation and State Holding Company. Furthermore, while in the equivalent period in 1999 net portfolio equity purchases by Hungarian residents were virtually zero, 2000 Q2 saw this figure jump to nearly EUR 60 million. All in all, foreign residents sold equities of Hungarian issue worth EUR 200 million in net terms. This occurred against the background of weak activity in European stock exchanges on account of high oil prices, as well as global uncertainty about high-tech shares. This must have fed through to the Hungarian stock market as well.<sup>5</sup> Households' are unlikely to have been the buyers, in light of their liquidity position and risk taking ability. In all probability, it was domestic financial enterprises, with special regard to those in majority foreign ownership, that bought up the bulk of the shares, since companies with Hungarian majority ownership cannot afford to make such large-scale purchases. Nevertheless, the fall in the market valuation of the shares involved may have also prompted some smaller firms to buy.

In respect of the components of debt-generating capital inflow, net foreign borrowing by the private sector was essentially neutral in the second quarter, with net intercompany loans equalling the outflows through other private sector lending transactions (worth roughly EUR 180 million). As net government security purchases by foreign residents were also at a low level (EUR 24 million), debt-creating financing basically reflected

<sup>5</sup> Moreover, it cannot be ruled out that the intensification of the disagreement on pricing issues between MOL oil company (one of the largest Hungarian participants in the stock exchange) and the government was among the factors prompting foreign residents to withdraw from the stock market.

credit transactions by the National Bank and the government denominated in foreign exchange. This was partly associated with a fall of some EUR 160 million in foreign exchange reserves, with the rest accounted for by the drop in the Bank's other short-term foreign assets.<sup>6</sup>

The capital account balance, including unrequited capital transfers as well as transactions in non-produced and non-financial assets, also showed a surplus (of approximately EUR 70 million) during the second quarter.

### 3 International investment position

The net international investment position showed foreign liabilities as standing at EUR 30.9 billion at the end of 2000 Q2 (see Table V-4). Net foreign liabilities in the form of non-debt elements fell from EUR 19.8 billion in the previous quarter to EUR 19.2 billion, due primarily to the plunge in foreign residents' equity holdings qualified as portfolio investment, while net foreign liabilities in the form of debt elements rose from EUR 11.3 billion to EUR 11.7 billion. Net foreign debt exclusive of foreign residents' forint-denominated government security holdings and intercompany loans, amounted to EUR 6.5 billion at the end of the second quarter.

*Non-debt* claims on foreign residents showed a slight increase during the second quarter, with the foreign direct investment by Hungarian companies net of intercompany loans and portfolio investment foreign equity holdings rising to EUR 1.5 billion and 150 million, respectively. The latter is an increase of 50% over a single quarter, with the effect of cross exchange rate changes being negligible. Foreign residents' direct investment in Hungary (net of intercompany loans) rose from EUR 16.4 billion to EUR 17 billion, which was, however, more than offset by the drop in non-domestic residents' portfolio-type equity holdings, down from EUR 4.9 billion in the first quarter to EUR 3.8 billion. As was noted in the section on financing, net equity sales accounted for EUR 0.2 billion out of this EUR 1.1 billion decrease. Adjusting the change in market valuations with the change in the stock market index<sup>7</sup> accounts for another EUR 0.8 billion, considering that the stock market index fell from 10,000 points to 8,318 during the course of the quarter. The EUR 100 million fall left unaccounted for is partly explained by the fact that not only stock-exchange traded equities were involved, and partly that there were other revaluations and changes in accounting principles. The combination of these developments brought about the decrease in the value of net foreign non-debt liabilities, which were previously following a steady upward trend, to EUR 19.2 billion at the end of the first half of 2000 (see Chart V-5).

<sup>6</sup> While in view of the balance of payments figures this is a valid statement, from the aspect of economic analysis it has little if anything to say, as it basically reflects the second-quarter servicing of financial claims generated in the first quarter. Thus, looking at the two quarters as one unit, the National Bank recorded no increase in short-term foreign claims.

<sup>7</sup> Inaccuracy is unavoidable here as, in principle, the balance-of-payments statistics also include the data on equity trading taking place off the stock market. The fall in the valuation of non-stock-exchange traded shares cannot be determined correctly because of the even greater inaccuracy of related data.

Chart V-4 Current account deficit and non-debt generating financing

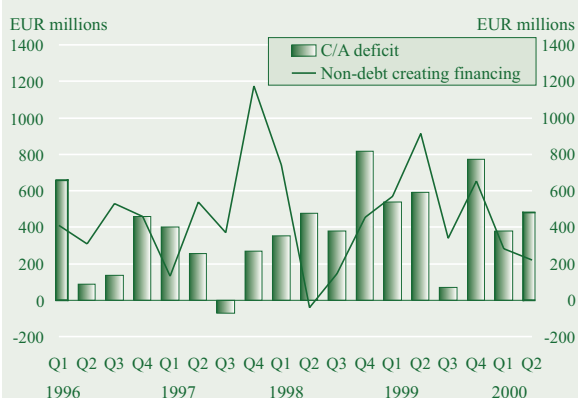
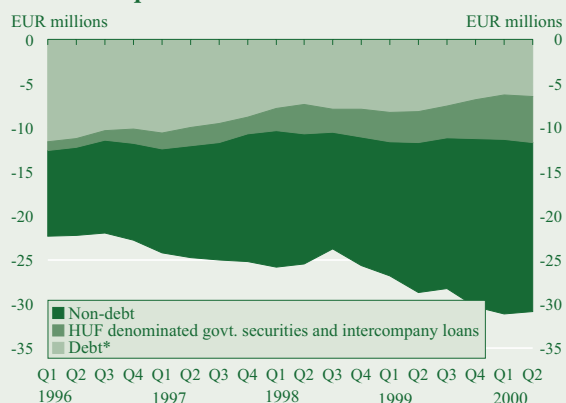


Table V-4 International investment position

	EUR billions		
	1999	2000	
	Dec.	March	June
<b>Net international investment position (=1-2)</b>	<b>-30,4</b>	<b>-31,1</b>	<b>-30,9</b>
- non-debt (=1a.1+1b.1-2a.1-2b.1)	-19,1	-19,8	-19,2
- debt (=1a.2+1b.2+1c+1d-2a.2-2b.2-2c)	-11,3	-11,3	-11,7
<b>(1) Foreign assets (=1a+...+1d)</b>	<b>19,1</b>	<b>20,9</b>	<b>20,7</b>
(1a) Direct investment abroad	1,6	1,7	1,7
(1a.1) Equity capital	1,4	1,4	1,5
(1a.2) Other capital (intercompany loans)	0,2	0,3	0,3
(1b) Portfolio investment	1,2	1,7	1,7
(1b.1) Equity securities	0,1	0,1	0,1
(1b.2) Debt securities	1,2	1,6	1,6
(1c) Other investment	5,6	6,3	6,2
(1d) International reserves	10,8	11,2	11,0
<b>(2) Foreign liabilities (=2a+...+2c)</b>	<b>49,5</b>	<b>52,1</b>	<b>51,6</b>
(2a) Direct investment in Hungary	19,1	19,5	20,2
(2a.1) Equity capital	16,2	16,4	17,0
(2a.2) Other capital (intercompany loans)	2,9	3,1	3,2
(2b) Portfolio investment	16,9	17,7	16,2
(2b.1) Equity securities	4,3	4,9	3,8
(2b.2) Debt securities	12,6	12,9	12,4
(2c) Other liabilities	13,5	14,8	15,2
<b>MEMORANDUM ITEMS</b>			
(M) Government securities held by foreigners	1,7	2,3	2,3
<b>Gross foreign debt* (=2b.2+2c-M)</b>	<b>24,4</b>	<b>25,4</b>	<b>25,3</b>
<b>Net foreign debt* (=2b.2+2c-M-1b.2-1c-1d)</b>	<b>6,9</b>	<b>6,3</b>	<b>6,5</b>

\* Excluding non-residents holdings of government securities and intercompany loans.

Chart V-5 Components of net international investment position



\* Net of forint-denominated government securities and intercompany loans.

Table V-5 Composition of foreign debt\* by sectors

	December 1999		March 2000		June 2000	
	EUR billions	%	EUR billions	%	EUR billions	%
<b>(1) Gross foreign debt (=1a+1b)</b>	<b>24.4</b>	<b>100.0</b>	<b>25.4</b>	<b>100.0</b>	<b>25.3</b>	<b>100.0</b>
(1a) NBH and government	13.4	54.9	13.6	53.3	13.1	51.7
NBH	9.8	40.0	9.6	37.6	9.2	36.2
Government	3.7	15.0	4.0	15.7	3.9	15.5
(1b) Private sector	11.0	45.1	11.9	46.7	12.2	48.3
Credit institutions	5.5	22.6	6.1	23.8	5.9	23.3
Corporate sector	5.5	22.4	5.8	22.8	6.3	25.0
<b>(2) Net foreign debt (=2a+2b)</b>	<b>6.9</b>	<b>100.0</b>	<b>6.3</b>	<b>100.0</b>	<b>6.5</b>	<b>100.0</b>
(2a) NBH and government	1.3	19.3	0.3	5.4	0.7	10.1
NBH	-1.9	-26.8	-3.2	-50.6	-2.8	-43.6
Government	3.2	46.1	3.6	56.0	3.5	53.7
(2b) Private sector	5.6	80.7	6.0	94.6	5.8	89.9
Credit institutions	2.0	28.3	2.7	41.8	2.6	39.6
Corporate sector	3.6	52.4	3.3	52.8	3.3	50.3

\* Excluding government securities held by foreigners and intercompany loans.

At the same time, the *debt*-type net investment position seemed to indicate a mild increase in foreign liabilities following the previous flat level. In the assets category, international reserves fell to EUR 11 billion, while portfolio and other assets remained virtually unchanged relative to their first-quarter level (roughly EUR 8.1 billion). Despite the continued rise in the item of other investments within the liabilities category, there was only a slight increase in liabilities, because of the downturn in portfolio investment. Considering total debt-type investment, the rise in liabilities, reflected in the debt-type net investment position, was due to the fall in claims on foreign residents.

The balance of debt-type investment calculated without (foreign-denominated) government securities and intercompany loans equals the net stock of foreign debt. This figure rose from EUR 6.3 billion at the end of the previous quarter to EUR 6.5 billion, mainly as a result of the fall in the National Bank's foreign assets (including the reserves) (see Table V-5). Thus, the portion of net foreign debt accounted for by the Bank and the Government rose from just over 5% to 10%. Gross foreign debt (EUR 25.3 billion) remained basically unchanged relative to the end of the first quarter, reflecting a rise in the share of the private sector and a fall in the share of the Bank and the Government. Thus, the private sector and the government together with the central bank shared nearly equal parts in the gross foreign debt.